

HUNGER

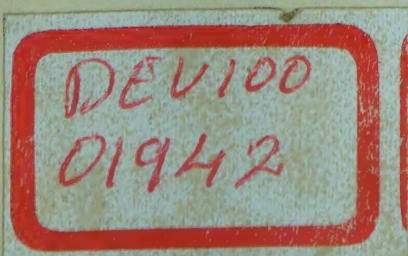
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Community Health Cell
Library and Documentation Unit
BANGALORE

HUNGER

(A Report on India)

By
Bharat Dogra



1983

Social Change Paper 5

Hunger

A Report on India

Mankind's most serious problem examined in the context of a country where it exists on the largest scale.

by Bharat Dogra

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Dedicated to my parents

Other Social Change Papers

1. The Milk Muddle
2. What Ails Farm Research ?
3. Our Languishing Labs—where scientists wither and wilt.
Price : Rs. 6 in India. \$ 2 abroad.
4. The Greater Green Revolution—High Technology Promotes Dependence and Hunger in Rural India.
Price : Rs. 10 in India. \$ 3 outside India.

Note : Paper 1 and 2 are out of print. Limited copies of paper 3 and 4 are available. Paper 4 and Paper 5 should preferably be read together. All papers have been written by Bharat Dogra.

Other Publications by the same author.

1. Forests and People (second/revised addition 1983)
A report on the Himalayas. This is a book on ecological ruin in the Himalayas and the efforts of villagers and social workers to check this ruin. Price : Rs. 15 in India. \$ 3 outside India.
2. Victims of ecological ruin. Mining environment and people—a case study of Doon Valley.
Price : Rs. 3 in India. \$ 1 outside India.
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Koramangala

Mass starvation deaths—Is the threat over ?

According to official statistics, about 1.5 million people perished in the Bengal famine of 1943. According to other, more reliable estimates, the death toll was around three million.

Since then there have been several droughts in India and widespread hunger has been reported, but nothing resembling the 'hundreds of thousands of hungry people dying' in the villages and roadsides that was characteristic of the Bengal famine of 1943 has taken place in India after freedom from colonial rule in 1947.

This is the biggest achievement of independent India. However, have we already progressed so much that we can claim with total certainty that the days of mass starvation deaths are behind us ? Can we afford to be too sure about this ?

In March-April 1983 news about the abnormally high death-rate in several villages of Rajasthan, specially in the desert districts of Jaisalmer, Barmer, and Jodhpur, started trickling in. The high rate of deaths, several reports pointed out, was caused by diseases, shortage of drinking water, widespread hunger and malnourishment, and the consequent lower resistance of the people.

The first reports came from Solankiya Tala village (population 8,000) in Shergarh tehsil of Jodhpur. Rajasthan Patrika, a leading Hindi newspaper in Rajasthan published from Jaipur, Jodhpur and Udaipur, highlighted the widespread distress in this village and elsewhere. The government admitted 59 deaths in Solankiya-Tala village between February 2 and March 19. The Patrika reported that in several villages for 2 years nearly half of the population was eating only once a day, and they were getting only Rs. 1.5 to Rs. 2.9 at relief-work. (see notes at the end of the book).

On April 14 the Patrika reported that 100 people had perished in Bhaniyan panchayat in the last two months. In Patel Nagar village, near Bilara, 25 children died in the last one week.

On April 17 the Patrika reported that 23 people had died in Swami Ji ki Dhani village (in Pokharan tehsil of Jaisalmer district) during the last one month. 50 families of this village were subsisting on just one roti of bajra, and 20 families had sold all their belongings. In Mandwa panchayat 20 children had perished in a fortnight, and 200 were ill. Not even a drop of water had been obtained from the pipe line laid in June 1979.

On April 11, the Patrika quoted the Relief Minister of Rajasthan, Mr Hanuman Prabhakar, as stating that the state government was having difficulties in adequately organising relief work due to the availability of less aid from the centre. A restriction had been imposed, he said, on overdrafts. Earlier on March 25, the opposition leader Mr Shekhawat had lamented the lack of funds for relief work while tens of millions of rupees were owed to the state government by big industrialists.

Several journalists from other newspapers and magazines have reported the tragic plight of the people in these desert villages. Ramesh Menon, correspondent of India Today, (May 15) covered a wide area. He also mentions several villages in which an abnormally large number of deaths, much above the average, have taken place recently. Harlai village (population 1,600) is located 23 kms away from Osian. In the last two months, about 20 people have died. In Loharki village, about 35 kms. from Pokharan, about 15 children have died in the last two months.

Menon also mentions several villages where a large number of deaths taking place have not been mentioned in the official records. In Matora village 30 kms. from Osian town, (in Jodhpur district), over 30 villagers, half of them below 45, have died in the last two months of fever and pneumonia. But the register supposed to be maintained by the local health worker and the teacher at the village school does not mention the deaths. Bhoopavat, patwari of Solankiya Tala states, "Even

we do not know how many have died in the last two months. In the remote areas of the village, the dead are cremated in the fields, and no one ever gets to know about it”.

At the free medical camp set up at Solankiya Tala, in the 20 days from March 11 to March 31, as many as 1469 patients were treated. Many living at great distances from the camp could not take advantage of the free clinic.

Menon also gives examples of villagers facing acute hardships due to scarcity of drinking water. Khara village (population 3,000) in Jodhpur district is located 28 kms from Phalodi town and has absolutely no supply of drinking water. Camel carts laden with brass and earthen pots leave Khara early in the morning, for Phalodi, rest there during the night, and return early the next morning to Khara. Day after day.

In Padasala village (population 300) in Jodhpur district, 60 kms from Jodhpur town, 30 people have died in the last two months—20 were children below 7 years. Bacillary dysentery caused by polluted water has created havoc in this village.

This India Today report quotes Dr Kesrimal Khatri, a Barmer physician, “All along the 150 kms border with Pakistan, villagers are suffering from fever, bronchitis and gastro-enteritis caused by consuming toomba seeds and lana grass, which leads to inflammation of the intestines. Malnutrition caused by five consecutive droughts has considerably weakened the resistance of the villagers”.

The shocking extent of hunger and related distress is brought out vividly in this report, “Pokharan is one of the most backward areas of drought stricken Jaisalmer. The road to Chhayan from Pokharan passes through miles and miles of arid land littered with cattle skeletons. Says Sang Singh, 65, a Chhayan villager. “We are reduced to such poverty that we even crush grass that camels eat and mix it with chapati flour to increase the quantity of food”. Uttan Singh, prostrate with jaundice for a month affirms, “I have 40 acres of land lying barren for five years. Now I am a pauper with no money

even to buy medicine". Like all the villagers in the desert belt, the Chayan villagers often find that they not have enough bajra flour for even one chapati. So they mix a handful of flour in a few glasses of water, boil it and drink it as a soup". Menon is particular in pointing out that most of the victims of the 5 year long drought are from poor families.

Another journalist Kamal Sahay travelled from Jaisalmer to Lunar village, near the border of India and Pakistan. His report was published in Ravivar. (May Ist). Extracts (translated from Hindi) :

"Lunar village, on Indo-Pak border, nearly 90 kms. from Jaisalmer town, has four wells. Two of these have dried up. Animals drink water from one village, people from the other one. Water is saline. Not only insects but sometimes even dead rats are found in this water. People from Lunar village get their rations from Dabhri village, but when grain is not-available here, people have to go to Sam, located nearly 50 kms. away.

"In Damodra village, on way from Jaisalmer to Lunar, a tank was constructed nearly 12 years back to bring pipe water. But the water was so saline that even birds did not drink it. According to the Jaisalmer collector, this scheme has flopped fully. The government has constructed pucca tanks to serve all villages, but the water available is very dirty....

"In Kanai village large scale relief work was started only at the time of the arrival of the Prime Minister in 1980 and suspended soon thereafter. Water has to be fetched from miles away....

"Sangreki village is deserted. Every one has gone away in search of employment. Sand is accumulating rapidly. It may devour the entire village when a storm comes. Several villages have been deserted in this way....

"In Jaisalmer there are 64 tankers to supply water in 284 villages, but half of these are generally in need of repairs, and for this they have to be often sent to distant Bikaner....

"Tubewells do not serve their purpose due to frequent non-

availability of electricity. In desperation people break the pipes to get some water.

“In Bhabri village of Jaisalmer district, several children have died but the deaths have not been registered”.

Earlier Ravivar published another well-written report on the 5 year old drought situation in the desert written by Seema Mustafa. Extracts :

“Solankiya Tala is located nearly 130 kms from Jodhpur. 8,000 people of this village are spread over an area of nearly 50 square miles in nearly 1000 huts. In hut after hut the same story is repeated—five years of drought, shortage of food and water, illness, no chance of getting medical aid, and then death”.

“Near Solankiya Tala is a prosperous patch of green, a farm irrigated by tubewells and owned by Health Minister of Rajasthan Shri Khet Singh Rathore, who has been vociferous in denying deaths due to starvation.

“In Solankiya Tala only 600 persons have been given employment while nearly 5000 men and women want work in this village”.

When asked about the inadequacy of relief work in Solankiya Tala, the Collector told Mustafa, “Solankiya Tala is not the only suffering village. Within Shergarh tehsil there are eight to ten villages where conditions are similar to Solankiya Tala. Tell me, what can I do” ?

In one more report on Solankiya Tala (published in Indian Express, (May 7) Arun Kumar points out that the various official reports, (including those of medical experts), which have sought to minimise the role of hunger and malnutrition in these deaths do not tell the entire story.

“What the experts failed to interpret correctly is the pestiferous spread of diarrhoea, URI, fevers with cough, a very common condition of dehydration among the very young and the very old, and a general condition of exhaustion, prostration and imbecility among adults of all age groups. An

entire people have long lost their resistance to withstand even minor ailments.

“A week at Solankia Tala and a close peep into the stores, pots and plates revealed that most residents have been subsisting on a mere 1000 or less calories per day per person for over 1000 days. A whole family of six or more persons manages to see through a day on about a kilogram of bajra flour mixed in hot water, a sticky paste like preparation euphemistically called Reshma or Doh”.

While the conditions are probably worst just now in the desert of Rajasthan, several other areas of the country have also experienced widespread distress in recent years. For example, several areas of Orissa where the scourge of drought has been followed by disastrous floods.

In this context it should not be forgotten that even during the decade of the seventies mass hunger deaths have occurred in several parts of Asia and Africa, in Ethiopia (around 1,00,000 deaths in 1972-73), the Sahelian countries (1,00,000 deaths in 1977 alone) and Bangla Desh (26,000 deaths in 1974 according to official statistics, much higher deaths according to other sources). As the drought flood cycle appears to be accentuating in India, the overall resource situation is tight, inequalities in the villages show no signs of decreasing, food buffer stocks go on declining and the administrative machinery meant to move foodgrains and provide relief is ridden more and more with corruption, the chances of mass starvation deaths in India also cannot be entirely ruled out—in Rajasthan, Orissa and elsewhere.

‘Normal’ hunger—the lean seasons

However hunger is not just a feature of drought years in India. Even in years of normal crops the ‘lean’ season extends over a long period. This is the time when employment is hard to find, and a large number of the villagers, specially the agricultural labourers and marginal farmers, find it extremely difficult to meet the minimum food requirements of their families (the months of ‘lean season’ may differ from one region to another).

It is a grim tragedy, enacted on a large scale in the country year after year. The following report on hunger during the lean seasons is from three villages of Banda district, Uttar Pradesh.

In two of these villages development efforts have made substantial inroads but in one of these the land ownership pattern is extremely unequal while in another the inequalities are of a much milder nature. The third village selected is an extremely remote one, where the tribals live in a cruel world of oppression and hunger.

Khapriha Kala village is a typical example of an Indian village of unequal land ownership pattern - on the one hand there are a few big landowners owing 50 to 100 acres or even more (one family owns several hundred acres) and on the other hand there are a large number of landless or near landless families.

Baburam Ji Gupta, a big landowner whom officials generally contact when they have some work in this village, laments that the past few years have been very bad for farmers. The acute drought in 1979-80 was followed by a hailstorm, untimely rains and high damage by pests. The kharif crop of jowar has been by and large lost, and the coming rabi harvest is likely to be good. As a result of the various misfortunes, he says, the farmers of his village have still not recovered from the 1979-80 drought.

Even Gupta admits that the poor people of his village face acute hunger for a long period, from December 15 to March 15, even if the crop is normal. He insists, however, that there is no exploitation of the workers and attributes this hunger to lack of employment in industries etc. This is why, he says, he has started a charkha (hand - spinning) centre at his home (However I learn later that the women employed here are able to earn less than one rupee per day). Gupta says benevolently that in his village farm workers are paid as much as Rs. 8/- per day but I learn later that in fact they earn only half as much, in some cases going up to Rs. 6/-.

Two starvation deaths were recently reported in local newspapers. The extent to which hunger contributed to the death of these two persons, both of them over 70, can be debated, but what is beyond dispute is that the landless and the near landless people of this village are in the grip of hunger for several months in a year - the length of this period depending on seasonal factors and the availability of relief work. At the time of my visit to this village on February 9, 1983, it appeared that more than half the population of this village, including neighbouring hamlets like Kharehi and Usra Parva, were suffering from hunger, several of them from acute hunger.

In Kharehi most of the people own small plots of unirrigated land. The people here said that except for three months, during the rest of the year they suffer to a lesser or greater extent from hunger. The present days, they said, are such that on some days nothing is cooked and they subsist on raw gram plucked from the fields.

In Usra Purva, a basti inhabited by people of Kewat caste who are landless labourers or marginal/small farmers, I met Ram Awtar, who lives in a joint family of 25 which, he says, has only 5 kgs. of grain left with them. On the day I went there he took a loan of Rs. 200/- from a big landowner so that his family can survive this lean period. We met several of the officially listed 'destitutes' who have stated receiving a monthly ration of free grain and others who probably should also have been considered for this scheme but have not been. The children were nibbling at raw gram plucked from fields to ease their hunger.

While the 1979-80 drought was very intense, the large scale relief work had eased the situation. "Now our situation is even worse, although there is no drought", said a resident of this village. This year relief work is very scanty and the payments are not being made in grain. They go to Khapriha market to buy their grain, adulterated grain at open market rates, as the possibilities of getting fair price grains are rare.

Many families have been forced to take loans, and this

will later create problems as even when the rabi harvest is ready, their scarcity will continue due to the obligation to pay the loan and its interest. "Sometimes we are given 3 maunds of wheat, and asked to pay back three maunds of the much more expensive arher (a pulse)". Most of the loans, needless to say are taken from the big landowners of the village. An additional problem faced in this basti is the erosion of land by a river and the threat of floods. Not only drought but also floods have played havoc with their lives in recent times.

As we are about to leave, a youth gets up to speak, "You have heard enough of how much hunger there is. But remember also that the entire village can be fed on the produce of the land owned by the biggest landowner of this village".

As we leave Usra Purva, we pass by same ditches that appear to have been dug up freshly "These were dug up more than a year back in relief work, only the dust that had been settled in has been taken out to make them appear freshly dug up. The relief organiser is going to show this as this year's work, and make a lot of money for himself".

Near the market we meet Phoolmati, a middle aged woman who belongs to a high caste Thakur family which has 12 members and owns 8 acres of land. They are going through a very lean period, I am told. How many times do you cook food these days ? I ask her. Thrice, she replies. One of her neighbours interrupts to say that being high caste, she is saying this just to keep her izzat - honour. Actually her family cooks only one meal these days.

Tulsa is not more than 8 years old, and she is already contributing to her family's income by spinning at a charkha. Hesitatingly I ask her what she eats these days. Roti-bhaji in morning and whatever is made at night, she replies. During the rest of the day including her working hours, she does not eat anything. She says that she does not feel hungry.

Sabiya, still in her youth, has to feed a family of 10 members, as her husband has gone away from the village. She spins yarn and takes loans.

In Bilgaon village of Mahua block the inequalities are less extreme - this is mainly a village of medium and small farmers, although some families own 30 to 40 acres of land and some are landless. The permanent agricultural labourers - halwahas - of this village take some cash and grain at the beginning of their contract period - roughly from July to March. At the end of the contract period, he has to return this amount. For his 9 month labour, he is given one and a half acres of land for the period of contract. For his daily work he gets a little nashta (breakfast) consisting generally of some jaggery or grain, He also gets four annas (one quarter of a rupee) per day. At the time of harvesting he and his family members are able to earn some extra money - at the rate of 1 pack of wheat out of the 21 harvested by them. Clearly, the wage of the labourer is extremely less and he leads a precarious existence almost throughout the year with the exception of the short harvesting season, To cultivate the one and a half acres of land given to him temporarily by the 'master', he has to often borrow bullocks and in return of this he has to render free labour during some days from April to June. No wonder, then that the labourers of this village informed us that on several days they eat only once a day.

The unattached labourers are able to earn Rs. 5/- a day on the days they get agricultural employment. According to the villagers, the wage payment at the various public works near the village is shown in official records at Rs. 7/- per day but in fact the labourers who seek employment there get only Rs. 5/- per day. Some of the castes which have traditionally provided the various kinds of services to the village community also face an acute hunger problem, in some cases because of the persistence of the old exploitative relations and in some cases because of the impact of the modernisation. For instance the doms cannot get drinking water from the well whenever they want, they have to wait near the well till someone takes pity and fills their bucket. For the services of cleaning the lavatories of high caste people the only payment they get is one roti per day from each household cleaned by them. Again for lifting dirty water from ditches of the homes of better off

households the payment they get is negligible.

On the other hand there are the telis, or the oil-men, whose trade of extracting oil from the ghanis has been ruined with the advent of an expellar in the village. "A single expellar has ruined the livelihood of at least 30 families", says an elderly person. Kamta Prasad Sahu owns 1.5 acres of land and has a family of 10. At one time the shortage of land did not mean much to him, and he prospered on the strength of his ghanis (hand - operated oil-extracting implements). But now his family lives from day to day, and their plight is not much better than of the agricultural labourers. Thus for different reasons people like the telis and the doms face food shortages to a lesser or greater extent almost throughout the year.

According to Maiya Din Tiwari, a widely respected village elder and former Pradhan of this village, the small and even the middle level peasants also have to face some days of hunger even during normal years. In the months of February, for instance, he said that most of these families are unable to feed themselves properly as they face dwindling stocks of grain which have to last till the rabi harvest.

In the years of drought, of course, their plight becomes much worse as unlike the farm labourers, they are somewhat reluctant to seek employment at relief work sites due to consideration of family prestige.

Last but not the least there are the destitute families like that of Chota, an old physically handicapped man with a family of five who has been rendered incapable of performing hard labour. Some of these families, including that of Chota, have been selected by the government for the supply of free ration of 10 kgs. per month from October to March-April. However till February he had received only 20 kgs. of grain.

Kesruva village in Manikpur block is an example of an extremely backward village. The entire village consists of one Thakur family which owns about 120 acres of land, and about 60 families of kol tribals which own land ranging from 1 to 4 acres, some of these are entirely landless. A small part of the big landowner's land is irrigated whereas all land of the kols is unirrigated.

Only some of the kols work on agricultural fields, where they get less than a kilogram of rice as their wages (this goes up to 2 kilograms during the harvesting season). Most of their time is spent in seeking employment on roads, tanks and forests where they get work, they can earn about Rs. 4 to 6 per day. Long periods of unemployment and lack of fertile land have together contributed to a precarious food situation for them. It is common for them to cook only one meal a day at evening and eat the left overs next morning. Vegetables and pulses are available very rarely, most of the time they eat jowar roti with salt. On some days the situation is so hard that the hearth is not burnt even once a day, on other days even salt is not available.

Hunger is a normal, continuous fact of their life, but it becomes more intense when nature is also unfavourable. This year due to untimely rains, the jowar (kharif) crop has failed. To some extent mahua collected from nearby forests helps them to keep total hunger at bay.

Some time back some families of Kesrava received a few hundred rupees as a grant under a government scheme but soon most of it was spent in paying back the loans and in a spurt of festive spending which, under present conditions of several pent-up and suppressed consumption desires, appears inevitable.

In a recent report published in Frontier (January 2, 1982) Prabhas Ranjan Gharami has described the life in the villages of the Sunderbans (West Bengal) for the four month long lean season, from the middle of August to the middle of November.

“Not to speak of the casual workers, complete absence of agricultural activity affects even the more fortunate attached ones. Temporary employment as domestic servants, soil digger or cowherd is hardly available... Fishing occupies the most prominent position as a subsistence activity. The simple equipment and the crude methods of fishing available to the villagers impose on them a severe strain. Usually, night is the more

opportune time- it yields a greater number of catches and the rare kinds of fish ; it also leaves the day free for other types of pursuit for food and money. Elaborate preparatory work for the night's operation must begin before sunset. A small portion of the paddy field has to be cleared and sticks have to be dug in at an interval of a few yards. Then by dusk earth-worms have to be dug out of the soil and stacked in a container. Finally these worms are hooked on the points of the fishing spear which is dipped below the water level and is connected to a stick by a string. At night, these earth-worms glow inside the water and fish are caught on the spear head. The process involves a long and sleepless night, constant vigil on the trap and worst of all, the persistent bites of mosquitoes. Another commonly used equipment for fishing is the "aatole", a triangular or a square like box made of bamboo. It is stuffed with 30-35 anails... In the evening the "aatole" with the baits is laid into the soil of either the river bed or the water logged paddy fields... Apart from the toll of laying down and taking out the 'aatole', the search for snails itself is a difficult work, one has to wade through a waist deep and sometimes chest deep water, hunt inside moss and water weeds and probe the river beds with rods in hand. A third method is one of hooking on small fish as baits to the points of the fishing spear which is connected to sticks dug into the soil of the river bed or the paddy fields... This method too involves the strain and hardship of night long vigil.

"All these methods of fishing are extremely unreliable. Snakes may enter into the "aatole" and destroy the fish and the bait, or instead of fish they may get pinned onto the points of the fishing spear attracted by the bait. Even the days of successful fishing bring a reward of only a kilogram or two of whole wheat flour. Wheat flour is cheaper than rice and a day's income from selling fish is never high enough to allow a family of about five to seven more than a meal of two kgs. of wheat flour boiled with about two litres of water.

"Fishing, therefore, has to be supplemented by other activities. All kinds of obscure fruits, flowers, leaves, creepers, and roots must pass as food. Some feed on wild fruits like the

'keora', others on all kinds of 'spinach', and yet others on the river-weed fruit called the 'shaluk' or on the stem and flowers of a tuber like the 'kochu'. Sometimes even wilder weeds and moss from the ponds like the 'dhap' or creeper of obscure plants like the 'gelegate' and 'telekucha' are added to this strange array of edibles. All this stuff, boiled and mixed with a minimum of salt, may serve as the only diet for a family for a continuous stretch of 15 to 20 days. What is more important is that neither is the stock of these strange edibles inexhaustible nor can they be procured without hard and risky labour.

"The 'shaluk' for instance, has to be stolen from the landlord's pond at a risk of being beaten up. The hunt for 'shaluk' inside the field, according to the landlords, is harmful to paddy cultivation. Even the very act of hunting and picking out 'shaluk' is a prolonged and tortuous process. The search must begin early in the morning and continue up to mid-afternoon. It involves unbearable sweating under sheafs of paddy and a constant slashing of the sharp edges of paddy on the bare skin. The face blackens in the heat and the skin becomes raw and sore.

"Like the shaluk', the leaves and stems of 'kochu' also are available mainly on the landlord's land. They object to the uprooting of the 'kochu' leaves from their garden on the grounds that it tends to destroy the vegetable itself. So the 'kochu' leaves have to be either smuggled out of the garden at great risk or obtained in exchange of some labour for the landlord. Often in the hope of a few 'kochu' stems and leaves, the cow sheds are cleaned out, the kitchen swept or water carried.

"In order to pick up riverweed like the 'dhap', the villager has to wade in waist or sometimes neck deep muddy water at the risk of being attacked by leeches or of their feet being slashed by the broken shells of snails. Rotten and unhealthy food causes villagers frequent stomach upsets which they ascribe to overnight dreams of sumptuous food.

Below the poverty line

To get a better idea of the 'normal' hunger faced by

millions of families in rural India we may look at the life of a typical landless labourer of India. He is Sadlua who lives with his wife and three children in Amchur Nerva Khas village located in the Manikpur block of Banda district. He is a tribal—a kol. Sadlua does not own any land. His father, he remembers, owned land but all that has passed into the hands of the high caste landowners living in the neighbouring villages. At present even the land on which he has built a small hut of mud and thatch belongs to the forestry department, at least that is what the forestry officials have told him and his neighbours. In other words, he faces the threat of eviction any day from his present home.

I looked into Sadlua's present home, a hut of 15×6 feet with a small outer portion. The only possessions I could see was a cot (another one was lying outside), an earthen bin to store mahua flowers, a few aluminium utensils and a hearth. I visited this village on a particularly cold January morning. The mud and thatch hut certainly did not provide adequate protection from the remorseless cold wave. How did they spend their night, I wondered. For their bed they use rice straw, I learnt, and as they do not have any quilts or blankets they can only use a thin cotton saree in their place.

During the winter months it is so cold and damp inside their huts that they cannot sleep for a long time and till late in the night keep warming themselves besides a fire. The entire family does not have any woolen clothes either.

Of course the hut in which Sadlua lives, does not have electricity, but in addition these days he is unable even to afford a kerosene lamp because of the difficulty in obtaining kerosene oil. As there is no ventilation during the daytime also his hut remains dark.

Saldua, however, is not too much worried about this darkness. All his worries are centered around the most basic, the most important task of his life—that of providing one full meal every day to his family members. Just one meal, for providing two full meals a day is beyond his capacity. On an

average day, the only meal for the family is cooked in the evening, the left overs of which are eaten next morning before leaving for work, or rather in search of work. The major component of this meal is a cereal preparation, rice or roti made of wheat or jowar. It is only rarely that he can afford pulses or vegetables. Saldua owns a cow but it yields very little milk—less than half litre in a day and this milk is given to the children.

In a nutshell, Saldua's life is a relentless struggle to somehow obtain enough wheat, jowar or rice for his family's evening meal. Working from morning to dusk in the fields of landowners, or in the forests cutting trees or collecting minor produce. Saldua and his wife and sometimes his eldest child also try their best to achieve this limited objective but on several days they fail despite their best efforts.

For a day's work in agricultural fields Saldua gets one kg. foodgrains. In the summer when he is employed for one month in plucking tendu leaves he is able to earn up to Rs. 5 a day. Occasionally by collecting chiraunji seeds and selling it to traders in the nearest market he is able to earn Rs. 3 to 4 in a day.

Sadlua is aware that he is exploited by the landowners, the forest contractors and the traders. He is angry about this. His biggest problem, however, is not this exploitation. Even when he is exploited, he is able to get at least one meal for his family. His biggest problem arises when he cannot find employment even at this exploitative wage. As the agriculture in this region is not intensive and there is only one major crop, agricultural employment is available only for a limited number of days. The work of plucking tendu leaves and collecting chiraunji seeds is also of a seasonal nature, available only for a short time in a year.

How does Sadlua's family survive when there is no work. If there are any foodgrain stocks, they use them but these can only last for two or three days. Then they use the dried mahua flowers which they have kept stored in their earthen bins.

On some days they can earn a little by collecting firewood, and selling it in the nearest market. If Sadlua and his family spend their entire day in collecting two headloads of firewood and then walk to the nearest market to sell it, they can earn a little less than two rupees in a day, just enough to get their evening meal.

This, then, is the small world of Sadlua, one of the millions of Indians living below the poverty line.

Hunger is not confined to villages, Lakhan, a rickshaw puller, lives with his wife and two children in a one room tenement of Jeevan Park, one of the numerous 'unauthorised' colonies of Delhi. He lives from day to day depending on his day's earnings for the next day's meals. During the winter season when it is difficult to get customers his family has to frequently live on only one meal a day. This is also the plight of several other workers in the 'unorganised sector' of cities. Workers of the organised sector, including those employed in big factories, are better off, although they too occasionally experience periods of hunger during the days of lay-offs, strikes and factory closures due to disruption of electricity supply etc. A large number of workers in factories and other establishments are not regularised for a long time, with the result that they get 'starvation wages' for the same work for which the other 'regular employees' are paid reasonable wages. In addition there are a large number of old, sick and mutilated persons on the streets, depending on the crumbs of others. The system of 'fair-price' food rations provide better coverage to the elites, while several poor people cannot get rations.

No description of the problem of hunger can be complete, however, without mentioning the special problems of the girls and women of poor households, who suffer both on account of their poverty and sex. For instance, Rami in Tindwari block, Banda district.

A woman's work is never over

Even in the extreme cold of December, Rami gets up at

4 a.m., having guessed the time fairly accurately from the position of stars. Perhaps her first task...and one of the most tiring ones...in the day is to grind wheat. After about 2 hours grind, she cleans the utensils, sweeps the house and makes cow-dung cakes. To fill the water for the day's requirements she has to go 4 or 5 times to the village well. If the children get up meanwhile-26 years old Rami has a 6 month old daughter and 4 year old son—she also has to look after them. Then she cooks the meal—the only one that her family will have till the fall of night—and starts off for her work at about 8 a.m.

If her husband, is working on the same field they go together, otherwise they go their own separate ways. Rami carries her baby to the field where she works. She must reach the work-site at the right time, about 8.30 a.m. or else she will be badly scolded or even deprived of work for that day.

For nearly 9 hours she works more or less continuously. Even when she abstains for a small while to look after the baby, she is reprimanded and sternly told to hurry up. She then has to keep working no matter how loud the baby cries.

At the end of the nine hours, she is given one Kg. of grain, her earnings for the entire day.

Carrying the small bundle of grain and her baby, she hurries towards her house. When she nears her hut, she hears the joyous shout of her son that she been yearning to hear all day long. With her arms around her son, she enters the hut.

But she can spend only a little time with the kids. She has to bring fodder for the cattle and milk them. More water has to be fetched from the well. If Ram has also returned sometimes he lends a helping hand with all this, but not always.

Then she starts cooking the dinner. By the time everyone has finished eating, it is nearly 10 or 11 pm. Exhausted she throws herself on the bed, but there is no quilt or blanket to keep away the cold.

Then there are days when she cannot get any work and

these are even worse for no work means no food. There are also days when she is too ill or in a late stage of pregnancy- and yet she is forced to work. There are also days when she is made a victim of the big landlord's lust.

This is the way Rami lives. She is one of the millions of women landless workers in our country, and the story of all of them, with a few regional variations, is almost the same.

Counting the hungry

In the Sixth Plan (1980-85) a daily intake of 2,400 calories per capita in rural areas and 2,100 in urban areas, corresponding to a consumption expenditure of Rs. 65 per capita per month in rural areas and Rs. 75 per capita per month in urban areas has been adopted to define the poverty line. The per capita consumption expenditure is based on 1977-78 prices. On this basis 51 per cent of the rural people and 38 per cent of the urban people and 48 per cent of the people in the country as a whole are living below the poverty line.

At the time of this book going to press, of the various estimates of hunger and under-nutrition available in India this is the most compact officially accepted view of hunger in India.

It is certainly not our intention here to enter into a debate on the methodology of the various estimates that have been presented in recent years about the extent of hunger and malnutrition in India. Scholars in India have carried out a lengthy and sometimes irrelevant and trivial debate on this subject. Rather than present the tiresome debate, we decided to present profiles of hunger in some villages and families which, we hope, will give the readers a better idea about the wide pervasiveness of the problem in India than the conflicting estimates of the learned scholars. Further information about the groups affected by hunger (agricultural labourers, share-croppers etc.) in the following pages will also help in understanding the extent and nature of this problem. Here we present just one estimate of the extent of hunger and malnutri-

tion as this appears to be more helpful than several others in conveying the true situation.

The overall conclusions of D. Banerji's studies of poverty in terms of the degree of hunger satisfaction in the course of a long term study of poverty, class and health in 19 Indian villages, located in eight states, is that taken as a whole, almost half of the population is unable to satisfy its hunger all round the year with more than a third remaining hungry for three months or more.

In this study those who were unable to obtain two square meals (of any composition) all around the year were defined as 'poor'. Banerji concludes, "The proportion of the poor in the population will increase sharply if, instead of adopting merely the criterion of two square meals all round the year, the definition is changed to "two square wholesome meals all round the year" by including even a small quantity of dal (pulse), ghee or oil and iron in the meal of the adult and a small quantity of milk for children in the definition. The extent of poverty goes up still further if minimum norms of housing in terms of space and hygiene are also included. If, in addition, a minimum standard of environmental sanitation and quality of drinking water are taken into account, very few people will be able to escape being labelled as 'poor'".

Politics of mass hunger

Most Third World countries have a predominantly village based economy and this economy is dominated by a small or relatively small number of big landowners and moneylenders. Due to the control of a major share of land by them, a large number of villagers are landless labourers or share-croppers. They provide cheap labour on the fields owned by the big landowners. This relationship is almost always exploitative and the landless labourers and share-croppers generally do not get enough to ensure an adequate diet and other minimum needs of their families. Their control over this exploitative system gives the big landowners not only economic gains but also helps them to gain political power, which in turn

throws the doors open for further economic gains through contracts, jobs for relatives and misuse of development funds. Due to all this, the landowners are basically interested not in raising agricultural production but in retaining their grip over this exploitative system. On the other hand, the labourers and share-croppers have neither the resources nor the incentive to make any effort to develop agriculture and increase production.

In the context of this system it is not difficult to understand the shocking extent of hunger and the stagnation or near-stagnation of agricultural production in many Third World countries. Today science has advanced greatly and man has the capacity to feed a much larger population than presently exists on this planet. But science is ineffective when there are strong institutional barriers impeding the path of food for all.

Unfortunately most Third World governments have not considered it desirable to change the prevailing power structure in rural areas. Most governments are content to pass some inadequate legislation to help the rural poor, and implement this in an even more half hearted manner.

Thus mass hunger in the Third World countries is not only a feature of drought or other natural calamities. Even in normal years, during the 'lean' season which can run into several months, families of landless labourers, share-coppers, petty artisans and small peasants suffer from hunger, sometimes eating only one meal a day for several months in a normal year.

However, such hunger is a 'normal' feature and the governments are generally not bothered about this. They have to be slightly more bothered about the feelings of urban people as discontent can spread more easily in their concentrated population. Hence most Third World countries have a system of rationing subsidised food to urban people, the grain being procured from the more developed areas within the country or obtained from abroad as 'aid' or commercial purchase. Generally it has been seen that most of this subsidised grain

also ultimately goes to feed the relatively better-off urban groups.

According to a World Bank document (1977) titled 'Bangla Desh : Food Policy Review', 27 per cent of the food aid goes to police, military and civil services and to employees of large enterprises; 30 per cent goes to predominantly middle class card holders in six major cities; and nine per cent goes to supply mills for grinding flour for urban bakeries. Economist Joseph Stepaneck of the US Agency for International Development estimates that in practice "approximately 80 per cent of the ration supplied food serves those with cash in towns and cities".

Only during drought years do governments pay some attention to the food requirements of the rural poor. Special relief works are started. However, here too the officials corner a large share of the grain meant for distribution to the poor. Most of these officials come from the dominant class of the rural areas and are not far behind the traditional village exploiters in their oppression of the rural poor. Several others just find it more convenient and profitable to operate on the side of the dominant class. The result is that whether during 'normal' or 'distress' years, most of the benefits meant for small peasants and the landless are usurped by the dominant villagers and officials.

They, however, are not the only villains of world hunger. The prospects of food availability in the present-day world depend to a large extent on the behaviour of a handful of giant agribusiness companies involved in incredibly large-scale production, processing and trade of food items and manufacture of agricultural inputs. Directly or indirectly, the food and agricultural situation in most developing countries is strongly influenced by the decisions of these companies.

In brief, on the production side these companies desire that developing countries should follow energy-intensive strategies—the mix of HYV seeds, chemical fertilisers, pesticides and farm machinery. At the same time, these companies

want to control the production of critical inputs like chemical fertilisers and pesticides in such a way that the market situation is one of scarce supplies and high prices and profits. To maintain this situation in the international market, agribusiness not only exercises strict control over its own production but also maintains close scrutiny on the availability of technology and equipment to developing countries. Thus many developing countries face a curious situation—on the one hand they are encouraged to replace the traditional farming system by a modern system of HYV seeds grown with fertilisers and pesticides, and on the other hand are charged so heavy a price for these inputs that the importing country has to exhaust a big chunk of the foreign exchange resources in importing limited inputs which can at best be used to create a few islands of prosperity. At the same time, the supply of feed-stock, equipment, technology, etc., to the developing countries is closely controlled to ensure that they do not become self-reliant in respect of fertilisers and pesticides.

However, agribusiness firms do not only supply inputs, they are also big sellers of foodgrains. So they are always on the look-out for potential markets in Third World countries. Generally aid to a Third World country experiencing food shortages should mean helping it to increase its production. But often, instead of extending such help, food surpluses of the developed countries have been hastily dumped in such countries, creating disincentives for local producers. Generally such food aid has been related to import of technical inputs or commercial export of foodgrains at a later stage.

In addition, agribusiness also utilises its direct or indirect hold over several Third World governments to obtain rubber, tea, coffee, sugar, cocoa, cotton, bananas, vegetables and several other agricultural crops needed for direct consumption or processing in the developed countries, at extremely cheap rates. Low prices for minerals and cash crop exports have been a major concern of many Third World countries and are the single most important cause of their perpetual balance of payments problems and heavy foreign loans. But at the village level, such exploitation means double distress to the peasants

who are exploited not only by the agribusiness companies but also by the local merchants or other middlemen through whom their produce is sold.

Large-scale hunger appears outdated in this age of scientific miracles, but will persist so long as international trade reforms and land reforms in the Third World countries are not undertaken and implemented earnestly.

Mother earth's unequal sons

A large number of rural households do not own any land. According to the statistics of the 1971 Agricultural Census marginal farmers with holdings up to one hectare and small farmers with holdings between one and two hectares, together accounting for about 70 per cent of the rural households, owned only about 20 per cent of the land. At the other extreme, about 4 per cent of the rural households owning more than 10 hectares of land each, accounted for nearly 31 percent of the land.

Ownership of land is also linked to ownership of other assets, specially cattle. The pattern of asset ownership is also highly unequal.

According to the All India Debt and Investment Survey, the poorest 30 per cent of the rural population accounted for barely two per cent of the asset holdings in rural India (the share of these poorest declined from 2.5 per cent in 1961 to 2 per cent in 1971).

The government's land redistribution programmes is supposed to correct these inequalities in land ownership. However till March 1980 only 0.67 million hectares of land had been distributed among the landless and most of this land was of extremely poor quality.

It is an oft repeated myth about hunger in India and some other Third World countries that the people cannot be fed because the pressure on land is too high. The fact is that the number of persons per acre of cultivable land does not have any specific and certain relationship with the ability of a

country to fight hunger. Thus on the one hand we have 'dense' countries like China which have a very good record in fighting hunger and on the other hand some 'sparsely' populated countries of Africa which have experienced large scale famines in recent years.

Visiting villages in various parts of India I have been often confronted with the acute land shortage and land hunger among the poor. If only these people had more land, their hunger could be satisfied. Conversely, one can also argue that if only there were a smaller number of people, then the available land could have fed them better.

How distorted this line of thinking is becomes evident when one starts looking at the overall land ownership pattern in the villages. In many villages the situation is such that the land vested with about half a dozen big landowners (in some cases even a single big landlord family) can feed the entire village population. In other villages the inequalities may be less extreme, but here too the cause of hunger is unequal distribution of land rather than the overall shortage of cultivable land.

The Government of India has always sworn by its objective of reducing land inequalities. For this purpose ceiling laws have been enacted and on paper at least it is an important task of the district administrations to take over surplus land (land in excess of the ceiling limit) and distribute it among the landless. The extra land of the village community is also supposed to be distributed among the poor the landless and the near landless.

These ceiling laws, it should be pointed out, do not envisage a radical redistribution of land to create an egalitarian land ownership pattern in the villages. All that they strive to accomplish is to reduce to some extent the existing inequalities and to ensure that each village based family has at least one acre of land. In practice, however, it has not been possible to achieve even this limited objective.

Laws that were enacted to implement ceiling legislations

left several loopholes which the big landowners could exploit to save their land, and during most years even these inadequate laws were implemented in a tardy, half-hearted manner. Overall the response of the big landowners has been to divide their land among real and imaginary family members' so as to avoid handing over any land to the government, and also to transfer their land, in reality or on paper, to uses for which exemptions can be obtained, (for instance to orchards, fish ponds etc.) Thus only a very small proportion of the land which could have been made available under the even existing, far from radical laws has in fact become available for redistribution, and even of this only a portion has been actually redistributed among the landless.

Moreover, even when some land has been redistributed among the poor, it has been generally found to be the most unsuitable for cultivation—sometimes infertile and rocky, sometimes in ditches and drains, sometimes located far away from the village. And in numerous cases, powerful landlords and their musclemen have prevented or tried to prevent these 'beneficiaries' of the land—redistribution programme from cultivating the land allotted to them.

The result of this farcical land reforms exercise has been that while extreme land—inequalities remain, while millions remain landless, several district administrations declare glibly that the land redistribution work has been more or less completed (leaving aside the frequently large number of court cases as the landowners frequently resort to legal means to prevent even the small scale take-over of their land). From time to time land redistribution drives have been launched but this is where they have ultimately brought us.

In Bodhgaya, the state of Bihar, where Budha once preached the message of love and equality, today the mahant (lord) of Bodhgaya and his manager have been engaged in crushing thousands of landless labourers. As in most other cases of big landowners in India, it is difficult to give precise estimate of the land owned by the mahant but according to reliable local people he controls over 10,000 acres of land

which he has been getting cultivated on exploitative terms from hired labourers. When youth activists of the Gandhian Chatra Yuva Sangharsh Vahini (CYSV) started organising a peaceful resistance of these labourers to demand a re-distribution of this surplus land, the local police, who got regular gifts from the mahant, colluded with the mahant, his manager and the hoodlums to crush the movement (the mahant also has good political contacts, having been a minister earlier in the state government).

The CYSV activists and labourers have been showered with bullets, brutally beaten up, jailed, implicated in false legal cases, driven to even worse hunger and destitution than what they experienced before. This struggle has attracted nationwide attention and subsequently the government has been forced to make some concessions but on the whole the oppression of the Mahant continues unabated.

While the success of land redistribution measures has been extremely limited, the land alienation among the poor has continued unabated. Indebted to the rich land owners for meeting their consumption needs or for loans of seeds and fertilisers, the poor are often forced to part even with their meagre possession of land, specially during bad agricultural years.

Nowhere is this more evident than in the case of large alienation of land among the tribals, to the extent that many of them have been reduced, within the span of a few decades, from being masters of all the land they could bring under the plough to landless beings working as virtual serfs for non-tribal landlords. By indebting the tribals through introduction of attractive consumer goods in their society when they did not have ready cash to buy these consumer goods, by charging inflated prices from people unfamiliar with paper currency, by falsifying the debt accounts, by colluding with revenue functionaries and last but not the least, by using hired musclemen and securing the goodwill of local police, the tribal's land was gradually swallowed. And even when laws were enacted to prevent the transfer of land from tribals to

non-tribals, the land alienation continued in a hidden form. Now the tribal remained the legal owner of the land, but had to sell all his produce to the moneylender at dirt cheap rates. In some places the powerful money lender even became the 'sharecropper' of the tribal as a prelude to snatching his land. Deprived of any land, the tribal remained dependent on the landlord cum money lender for periodic loans. and the latter consolidated his position further.

Dr. R. Gopal Iyer, who carried out extensive research on the tribals of Palamau district in Bihar, describes a big landlord holding hundreds of tribals in his grip in these words, "one Panchayat Samiti Pramukh has carved out an empire comprising several villages. He has in his pay 65 musclemen. The rate of interest charged by him varies from 1450 per cent per annum to 32,000 percent per annum or even higher. The realisation of such dues, particularly when agricultural produce is not only low but also fluctuating, is possible not through recourse to law but through the dispossession of land and livestock by sheer force and physical assault. Threat of eviction from homestead land and arson are not infrequent. In many areas even wives and children of defaulters are not spared".

Among his victims was "a tribal who had borrowed Rs. 50 and had paid back Rs. 160. Even then the landlord demanded Rs. 200 more and as a result of non-payment forcibly took away his wife and children. A tribal widow with tears trickling down her eyes reported to the Deputy Commissioner that her husband had borrowed Rs. 40 and paid back Rs. 270 during his lifetime. Still the moneylender was claiming Rs. 220 and torturing her".

Rape of earth—not by the poor

150 million hectares of land out of a total land area of 304 million hectares, nearly half of our land, is affected by serious wind and water erosion. Vast expanses of land have been rendered into waste land (called chos in the sub-mountainous

areas, or ravines in the Chambal area) due to the relentless water erosion. It was estimated in 1972 that every year India loses about 6,000 million tonnes of top soil (valued in terms of NPK nutrients at Rs. 700 crores) due to erosion of land by water run off. The loss is likely to be even higher now, due to increased scale and intensity of the problem of water erosion as well as on the steep rise in the price of fertilisers.

The areas so far covered by soil conservation measures, generally in an inadequate way, is only 23.40 million hectares.

Behind much of this ruin of land has been the relentless pace of deforestation. It has been estimated that during the last 25 years over 4 million hectares of forests have been lost to the nation.

Almost 12 per cent of the country's land surface is actually under adequate forest cover against the provision of 33 per cent tree cover made by the National Forest Policy resolution way back in 1952. Thirteen million hectares of land is classed as permanent pastures but these areas are in fact generally without any vegetation on account of either overgrazing or encroachments.

Even in ecologically crucial regions, deforestation has not been checked. Referring to the exploitation of pine trees in the catchment areas of the Ganga river and its tributaries in the Garhwal Himalayas, an official committee described this as the 'rape of the forests'.

Our coastal mangroves are ecologically important both because of genetic diversity that flourishes here, and the protection they provide against damage from cyclones, but these have been destroyed on a large scale. The coral reefs have been ruthlessly plundered for their mineral wealth in the Gulf of Mannar (Tamil Nadu) and in the Pirotan Islands (Gujarat) and also threatened in Lakshwadeep and the Andaman Islands. This has exposed coastal areas to greater sea erosion.

Afforestation work in many ecologically sensitive areas has suffered from callous neglect. The National Commission of Agriculture has noted, "In some of the river catchments, like that

of the Mahanadi or Chambal which have attracted attention in recent years by causing widespread floods, the total forests area adds to only 0.5 to 0.8 per cent of the total area of the catchments. In the case of 8 rivers projects started in the 4th Plan, no works were taken up in five of them till 1971-72 while in the two others total forest area treated was 8,800 hectares against a total catchment area of 1,081 million hectares. By all accounts this is an unimpressive performance”.

While the intensity of soil erosion and its impact on land fertility is widely recognised it is only rarely that the causes of this are examined in the proper perspective. As many other tragic aspects of our natural life, this ecological ruin is also rooted in the extreme inequalities of our social and economic system. Land inequalities not only affect the fight against hunger directly but also indirectly by reducing the fertility of land. As land most suitable for cultivation is cornered by the powerful, the weak peasants are pushed to the marginal land not suitable for agriculture, accelerating soil erosion. Governments unwilling to confront powerful landed interests are also content to distribute the marginal land among the landless, contributing to ecological ruin. The danger of such policies is specially acute in ecologically sensitive areas like the hill areas and the desert areas.

Villagers are blamed for destroying forests by overgrazing. What is often ignored is such analysis is that when in the past few years a large number of trees from neighbouring areas have been felled for industrial use, or else the villagers access to them has been stopped under one pretext or the other. Thus the villagers now have access to a much smaller forest area than to which they were traditionally used, while their population has increased. Hence they resort to overgrazing as a desperate move to survive when this survival is threatened by outside forces. Similarly the tendency on the part of the rural poor to clear forest land for cultivation, or to encroach on marginal land not suitable for cultivation, is often criticized for its adverse ecological implications. But it is ignored that they have been driven to this desperate move only because under the

present day inequitous land ownership pattern land is concentrated in the hands of a few and the poor are deprived of access to fertile land fit for cultivation.

Those who are often held to be the perpetrators of ecological ruin—the half starved semi naked villagers and their thin emaciated cattle—are in fact only unwilling instruments of the powerful forces that are really responsible for ecological ruin—the big landlords contractors and industrialists.

The most hungry—farm labourers

Almost all over the country the agricultural labourers are subjected to extreme forms of exploitation. Most of the agricultural labourers are landless labourers, although quite a few of them also own some land of their own which is inadequate for their subsistence and so they seek additional income by working as wage labourers. Minimum wage laws have of course been enacted in the case of agricultural labourers but these have seldom been implemented. Their hungry and uncertain life can be imagined from the fact that a large number of them earn only around 1.5 kgs of grain (or its cash equivalent) after a day of hard work, and can get this kind of employment also only for about one-half to one-third of the days in a year specially. The bonded labourers earn even less than this.

The standard of living of agricultural labourers depends on the extent of employment opportunities available to them as well as on their real wages (i.e. money wages adjusted for the rise in prices). The results of the Rural Labour Enquiry reveal that number of jobs for agricultural labour households have been declining over the years. The estimated number of full days worked by men of agricultural labour households for wage employment in different agricultural operations declined from 208 in 1964-65 to 185 in 1974-75, that by women from 138 to 129, and that by children (below 15 years) from 167 to 145.

Employment opportunities in turn depend on the intensity

of cultivation and other agricultural operations as also on the number of hands competing for available work. Regarding intensity of cultivation, hardly any generalisations can be made for the country as a whole. However the existing ownership of land—use pattern which vests vast amounts of land in big landlords and which provides for cultivation of large chunks of land under conditions of exploitative share cropping makes intensive cultivation unlikely over a large part of the land. Regarding the number of hands competing for the available jobs, statistics supplied by the Rural labour Enquiry tell us that during the decade 1964-65 to 1974-75 the estimated number of total rural households increased by 16.6 per cent whereas the agricultural labour households increased by over 35 per cent.

This sharp increase was accounted of partly by an increase in the number of entirely landless households and partly by an increase in the number of those labour households who also own a small bit of land. However, it was the increase in the latter which was more pronounced—the number of such households increased by nearly 52 per cent within this decade. Thus it may be said that a very large number of small and marginal farmer households have been increasingly resorting to agricultural labour as the main means of their livelihood due to economic pressures increasingly felt by them. Hence there is a rapid spurt in the total number of agricultural labour households due to which employment opportunities for each household have been diminishing over the years.

Now let us look at the earnings of rural labour households as revealed by these statistics. Whether for men, women or children, whether for agricultural or non-agricultural operations, the money wages of farm labourers have increased during this decade. At the same time, prices have also increased, and increased even more significantly. In fact during this decade the All-India Consumer Price Index Numbers for Agricultural Labourers (base July 1960-June 1961) went up by 157 per cent from 143 in 1964-65 to 368 in 1974-75, a rise which has more than offset the wage increase of farm

labourers. For example, in the case of men, wages rose by 127 per cent from Rs. 1.43 to Rs. 3.24 but after adjusting for the price rise we find that the real wages came down to Rs. 1.20, a decline of 12 per cent during the decade. Similarly the real wages of women for agricultural operations suffered a decline of 7.4 per cent from 95 paise to 88 paise, while those of children a decline of 1.4 per cent from 72 paise to 71 paise.

In the case of wages for non-agricultural operations the wages of men came down from Rs. 1.54 to Rs. 1.27 a decline of 17.5 per cent. The wages of women labourers declined by 11 per cent from 92 paise to 82 paise and those of child labourers declined by 3 per cent from 74 paise to 72 paise. In other words, both from the point of view of employment opportunities in agricultural operations and the wages in the agricultural as well as non-agricultural operations it may be asserted with confidence that the agricultural labourers are now worse off than before. The perpetuation of the exploitative system and the sharp increase in the price of essential commodities are both to be held responsible for this shocking situation.

There is evidence that even the minimum wages fixed by law, not to speak of the actual wages received by farm labourers, are often below the minimum nutrition requirements. The minimum wage laws in Maharashtra were fixed by an Act based on the recommendations of a Committee headed by Mr. V.S. Page. The same laws were also applied to labourers working on the employment guarantee scheme in the state. Working on the assumption that an average worker needs a minimum of 2,000—2,200 calories, the committee recommended a minimum wage of Rs. 4 a day for rural labourers. In a recent assessment of the recommendations, Dr. Abhay Bang has pointed out that the committee has grossly underestimated the minimum nutrition requirement of farm labourers. Dr. Bang's discussions with Mr. Page revealed that the nutrition expert consulted by him for fixing the minimum wage norm was a Bombay-based diabetes specialist. The Page Committee's estimates were also based to a substantial extent on the ave-

rage of the National Sample Survey (NSS) findings. As Dr. Bang points out, the NSS figures record the amounts people actually purchase and consume and have little to do with biological requirements.

Relying on more reliable studies of the calorie requirements of agricultural and rural unskilled labourers Dr. Bang has arrived at the figure of Rs. 12.10. Dr. Bang concludes. "The minimum wage today actually works out to three times what the committee had recommended. And this calculation is within the constraints of the committee's framework but with a scientific basis for each assumption. Even so, it is a bare subsistence wage and does not aim at a balanced diet, nor does it make any provision for sickness or for pregnancy and delivery or for old age".

Twentieth - century slavery

Among agricultural labourers also the plight of 'bonded labourers' is the worst. These 'bonded labourers' are those who, because of the debt incurred by them or their ancestors, have to work for the landowners at a wage which is less than the 'market wage', and frequently without any wage at all other than the minimum subsistence food. Such bonded labourers can be found in agriculture, at dam sites, in other construction work, in forestry work, at brick kilns, in hotels and in several other areas. Their exact number is not known. A survey of bonded labour conducted by Gandhi Peace Foundation and National Labour Institute suffered from several limitations. In the absence of other reliable estimates, however, we may quote its conclusion. This survey found that 2.6 million bonded labourers existed in agriculture alone. The life of these bonded labourers is no better than that of slaves. In Rewa and Satna districts of Madhya Pradesh they have been traditionally paid in the form of a toxic pulse Khesari whose consumption can cause lathyrism, and thousands of these labourers are reported to have been crippled by this disease in these two districts alone. Their poverty is so extreme that they are forced, specially during drought years, to subsist

almost entirely on this toxic pulse (which grows on a hardy plant which can grow in adverse conditions and so the landlords find it convenient to pay them in the form of Khesari).

In recent years several official claims have been made stating that most of these bonded labourers have been satisfactorily rehabilitated. Most of these claims are false. To make this position clear, we present below a case study of this rehabilitation effort.

According to a study of bonded labourers in Manikpur block of Banda district by the Uttar Pradesh Development Systems Corporation Ltd. (UPDSC) out of an estimated total of 7,336 scheduled caste households in Manikpur, about 2,316 were bonded. 45 per cent of the bonded labourers were found to be bonded for over 10 years, 56 per cent of the scheduled caste households were indebted, the average amount of debt being Rs. 659.

This survey was sponsored by the labour department, Government of Uttar Pradesh. When its findings became available, an office for the rehabilitation of bonded labourers was set up in the small town of Manikpur in January, 1980. The office soon started a 'door to door survey, trying to locate all the bonded labourers that existed in this block.

It was found on the basis of this survey that only 252 bonded labourers existed in this block. The cases of all these bonded labourers were referred to the office of Sub-division Magistrate in Karvi. At his court, several of the identified bonded labourers said that in fact they were not bonded. After a lot of work the S.D.M. found that only 117 of the 252 labourers were in fact bonded. Cases of 30 labourers are still pending, while 105 have been declared as non-bonded.

According to the Project Officer, Bonded Labour Rehabilitation Scheme, almost all the identified 117 labourers have been rehabilitated. The work of the Project Officer is already considered over, and further identification work has been stopped. Budgetary allocations for further work in this direc-

tion have not arrived yet. It is likely that soon this office will closed down. The file marked 'Bonded Labour in Manikpur' will be closed with the final remark "117 bonded labourers found and rehabilitated".

A similar exercise has been carried out in the neighbouring Shankargarh block of Allahabad district. The UPDSC survey had found an even larger number of bonded labour households in Shankargarh block—as many as 5,221. However according to the findings of the labour department's 'door to door survey' only 173 bonded labourers have been identified. When these cases were reported to the court, only 104 'genuine' bonded labourers emerged. These have been 'rehabilitated'.

According to the law, the landlords who have been found to be in possession of bonded labourers should also be punished. In Mainkpur block 99 masters have been let away with a 'warning', 14 have been fined and another 5 have been fined as well as sentenced to imprisonment. However none of them is in jail—they are all out on bail.

I talked to some of the 'satisfactorily rehabilitated labourers'. I heard the complaints that they were given weak cattle and the goats which were not suitable for the climatic conditions that existed there and died in a few days.

Nearly Rs. 4 lakhs have been spent so far on the rehabilitation of bonded labourers. It to this we add the costs of the two surveys of bonded labourers, and the time and money spent on the project staff and the court proceeding the inescapable conclusion is that very little has been achieved at a huge cost.

If the results of the second survey differed substantially from the earlier survey which presented a much higher estimate of the number of bonded labourers the very least that could have been done was to invite the earlier research staff also to the project office and seek their opinion on the identification of the bonded labourers. This was not done.

The earlier survey had clearly stated that the living condition

of the so called free labourers in this area is also not much better off than that of the bonded labourers. It was also stated that if an attempt is made simply to rehabilitate the liberated bonded persons without keeping in view the problems of local labour force it is quite likely that the other free labourers of the area may become bonded later on.

Another important fact mentioned in the report was that the incidence of bondage is much less among those scheduled caste households which own one or more of the productive assets. For example, among those who do not own any land, about 97 per cent in Manikpur block and 83 per cent in Shankargah block are found to be bonded whereas this percentage is much less among those who own some land. This survey also pointed out glaring inequalities in the distribution of land.

In view of all these facts, the work of the bonded labour project office should not be confined to 'rehabilitating' a hundred and odd labourers. Even if it is admitted that for the time being there are no more bonded labourers in this area, the work towards giving the harijans and tribals some assets which reduce inequalities in land ownership should continue on a permanent basis.

Give me one-half of those grains you grew

The life of share croppers in most parts of the country, specially in Eastern India where the incidence of share-cropping is the highest, continues to be extremely miserable. In most villages they still have to give away one half of the produce to the owner and frequently also meet most of the expenses of cultivation.

There is a law fixing the share of produce that the land-owners can demand from them (generally one-third to one-fourth of the produce) but this legislation has generally remained only on paper. Before the share cropper can hope to benefit from law, he should be recognised by law as a share-cropper. However, owners of land usually keep the share-

cropping arrangements an oral transaction. The share cropper's name does not appear in the land records. So the share-cropper has no legal existence or rights in a court of law. This makes his struggle self-defeating, as the questions of produce share and permanent rights have to be decided on the basis of records of share-cropping.

Therefore, the crucial first step to be taken before any concrete benefits can accrue to them relates to registration of the share-croppers. This minimum protection is necessary before they organise to assert their rights, as otherwise the instant reaction of the land owners to any assertion of rights by them would be to evict them. Hence the importance attached to registering the share croppers in land reforms programmes. However as in the other areas of land reform, the actual progress made has been very little. The gang-up between the revenue authorities, specially village-level functionaries, and the big land-owners, ensures that the names are not recorded. In a court of law it is not easy for a share cropper to prove his status, specially when faced with the large number of false witnesses his tormentors can produce. Even when some concerted efforts in this direction have been made, the time-consuming process of meeting individual share-croppers and trying to make some sense out of conflicting claims, has ensured that very little progress is made.

P.S. Appu, experienced land reform administrator has concluded in a comprehensive review of tenancy reform in India, "It has been found that the provisions regarding fair rent are effective only for tenants who actually enjoy security of tenure. This is so because where there is no security of tenure the tenant who asks for the fixation of fair rent faces the risk of immediate ejectment. Even where the law provides for security of tenure, it is extremely difficult for tenants to claim tenancy rights successfully because most of the tenancies are oral and informal. Even in a village not far from Calcutta, where the peasantry was politically conscious, it was found in 1971 that share croppers were giving one half of the produce to the landowners. All the share croppers knew that under the

law they were required to hand over only 25 per cent of the produce to the landowners. On being questioned, the share croppers replied that if they insisted upon rights they would be thrown out of land and the administration would not be able to protect them”.

Violence against the poor

It has been seen in village after village, time and again, that whenever there is an awakening among the poor and they make an effort to organise themselves to assert their legal rights, sooner or later not only do they encounter violence on the part of the landlord but also the local police. The administration and the police generally side with illegal exploitation against the legal demands of the rural poor. Here we mention only a few recently reported cases (from a single state of Bihar) involving the repression of the poor (and those leading them) by the landlords, their hoodlums and the police.

According to a document ‘Agrarian unrest in Patna - an investigation into recent repression’ prepared by the People’s Union for Democratic Rights, Delhi (published in *Mainstream*, January, 1982).

“In at least seven blocks of Patna district in Bihar, the State Government and its police, with the active support of landlords, and with the explicit or implicit cooperation of all major political parties, are attempting systematically to suppress a mass-based democratic movement of poor peasants and agricultural labourers whose only demands are the guarantee of the rights granted to them by the Constitution and the implementation of various laws promulgated by the Government..... In the course of our investigation we found that the poorest sections of the population in the affected areas are living under extremely oppressive conditions. Inequalities in land holdings, denial of statutory minimum wages, beating up of labourers and molestation of their women-folk mark this oppression, and explain the origin of the unrest. The people have organised themselves under the banner of the

Kisan Sabha and voiced certain demands, all of which fall within their rights. The villagers have resorted to peaceful forms of struggle such as procession, meetings, and strikes. Besides, they have also reactivated the traditional system of panchayat-type ground meetings in villages and taken collective decisions..... The landlords of the area, irrespective of their political or caste affiliations, have forged an alliance with the local administration and frustrated the implementation of certain land and labour laws. They have responded to the movement launched by the Kisan Sabha by the show of armed strength. The police have conducted massive raids throughout the affected region, arresting and beating up scores of people. At least seven people have been killed in recent times due to police firing. According to reliable sources in the State administration there are plans to eliminate about 150 activists of the movement in staged encounters.

In Gaini village, Aurangabad district of Bihar, discontent had spread among the harijans labourers over the refusal of the landlords to accept their demands for payment of proper wages and overall extreme exploitation. Jogeshwar Ram does not even know how much loan his father had taken but he has been regularly paying the interest on this loan for the last 20 years. Mandhri Ram, to repay a loan of Rs. 100 has already paid back a crop of paddy and Rs. 800 but he is told by the money lender that he still has to pay Rs. 1000. It was against this extreme form of exploitation that the labourers of Gaini had begun to organise themselves, when on June 27, 1982, landlords attacked a harijan basti, killed six harijans and injured 10 and burnt down 29 huts. A six year old child was also killed. Some of the injured were thrown into flames of the burning huts.

Rajkishore Masiha was organising harijans in the native village of the Chief Minister of Bihar. He was trying to get harijans settled on a piece of village community land which was under the illegal occupation of a relative of a powerful politician. The result, first Masiha's brother was killed by hoodlums, then his father met a similar fate. On March 9,

1983, some hoodlums also caught hold of Masiha, slashed his tongue, then his hands and finally shot him dead.

Jyoti Prakash was organising rickshaw pullers in Buxar, a small town of Bihar, and also fighting several other injustices against the poor due to which he had incurred the wrath of local police officials. On March 17, 1983, when he was returning to his home with his daughter in a bus, six goons, two of them armed with rifles, got into the same bus and asked other passengers to get down. Then they fired in the direction of Jyoti Prakash first hitting his daughter and seriously injuring her. Then several bullets hit Prakash's frail body, instantly killing him.

In Tiruldihi township of Singhbhum district, Bihar, tribals had gathered to demand that relief work should be started in the heavily drought affected region. Instead the guards greeted them with bullets. These guns instead of grain incident was repeated elsewhere in the tribal belt of Bihar during this drought year.

The small man always loses

For farmers owning small plots of land which are just adequate for meeting their subsistence needs, life is a grim struggle for survival and adverse weather conditions can easily change their 'subsistence' status to one of 'frequent hunger'. While small farmers cultivate their land more carefully, more 'intensively' than the big landowners and hence can be expected to obtain a higher yield, it is also true that in various aspects of cultivation they suffer from several disabilities vis-a-vis the powerful and influential big landowners.

In the matter of irrigation, small farmers cannot afford to have privately owned pumpsets and tubewells and they depend for irrigation mainly on common sources such as canals, government tubewells, tanks etc. Generally the command areas of these irrigation sources are too big and there is a shortage of water. Using their influence and muscle-power, the big landowners are able to obtain irrigation water on a

priority basis while the small man is starved of water. However at the time of the payment of irrigation dues, the small farmer is charged at the same rate as the big farmers, spelling ruin for him. In some canal irrigated areas it is common to see the gunmen of powerful landowners guarding the canal to ensure that the needs of the powerful men are met on a priority basis.

In the matter of obtaining good quality, 'fair-price' fertilisers, pesticides and seeds from the block office and other agencies again it is the influential big landowners who corner most of the scarce supplies and then sell these at a higher price or in adulterated form to small farmers. Marketing channels are also different for the small farmers and the big farmers, the former having to depend more on traders and big landowners within the village for selling their produce while the latter are able to exploit the wider opportunities available outside the village to obtain a more remunerative price. The small farmer, because of his immediate needs and the debts he has to clear, must sell immediately after the harvest when the grain price is low, while the resourceful big farmer can wait for a more opportune time to sell a substantial part of his produce.

In a recent study "Marketing of foodgrains—an analysis of village survey data for West Bengal and Bihar" Suman Sarkar points out, "On the whole it is clear that if the marketing channels are broadly classified as those operating mainly in urban areas and those operating at the village level, then the frequency of the former is likely to be larger for bigger producers while the frequency of the latter is likely to be larger for poor producers. The channel use pattern of middle farmers has certain similarities with both the upper and the lower strata.

"The existing system of advance price payment to poor peasants partly explains why poor producers in West Bengal and Bihar fail in some cases to make the best use of the marketing channels which pay them relatively better prices. By receiving prices in advance, a poor producer enters a forward contract under which he is required to sell his produce immediately after the harvest. Prices paid in advance are usually lower than post harvest market prices.

“Village traders, travelling traders and small village shopkeepers typically pay advance prices to poor peasants. So do big farmers when they engage in trade. . . . The poor producers who receive prices in advance from traders operating in rural areas do so because without such advances they are not in a position to carry on production. The practice no doubt shows that, in some cases, the traders concerned have a direct sway over production on the smaller farms. Big farmers engaged in trade, who make advances to poor farmers and procure grains from them, often receive comparatively high prices from other channels, so that they make a good profit by reselling the product acquired by them from poor producers. . . Besides this, different categories of traders have been reported to indulge in discriminatory practices against poor producers in respect of prices and in some cases the former make advance price payments to the latter thus reducing their freedom to choose from among alternatives buyers...”

Another time when the poor often suffer heavily is at the time of ‘consolidation of holdings’.

In Vigahna village of Khurhand region, Banda district, land consolidation work was started in 1977 and completed in 1980. In the course of these three years, Chakbandi (land consolidation) became the dominant issue in the life of almost each one of these villagers, and the consolidation officials became the most important, the most powerful men in the world for them. At a stroke of their pen, the villagers knew, they could exchange their infertile land for good land, or even grab land in excess of what they could own. So they devoted all their wisdom and strength during these three years to appeasing the consolidation officials. Several poor peasant families were willing to deny themselves necessary expenses on food and clothes—often to the extent of selling the utensils in their home in order to be able to ‘serve’ the officials.

While every one tried to the best of one’s ability and resources, naturally the most successful were those who commanded the most resources and power in the village. They

managed to grab community land in the name of consolidation, and got their poor quality land exchanged for more productive land. Their gains were at the expense of the smaller farmers, who were ruined first by the (ineffective, as it later turned out) bribes they had to pay, then by the deprivation of their better quality land and lastly by the effort made after the consolidation to undo the injustice.

While a few individuals gained individually, the village as a whole was harmed by the encroachments of land meant for village paths, irrigation channels, grazing land and land meant for other common uses.

Shocking as all this may sound, what happened in Vigahna is hardly an isolated instance. Inquiries made regarding consolidation operations in other villages of this district revealed a similar story. Several farmers said that even heavier loss than what they had suffered already would be incurred in fighting legal cases to undo the injustice done to them, while several of them may lose these cases due to sheer lack of resources to pursue them for a long time.

There is no doubt that a lot of time, effort and money can be saved by consolidation operations i.e. by bringing the various small plots of land owned by a farmer in different parts of the village at one place.

Unfortunately, the efforts that have been made to tackle this problem in most parts of India have not been effective and have been implemented in an arbitrary manner.

For example a study conducted by the Programme Evaluation Organisation of the Planning Commission in 1969 regarding the impact of consolidation operation in Maharashtra (a state for which the necessary legislation had been passed in 1947) found that 77 per cent of the tenure holders retained 100 per cent of the original land and 14 per cent retained between 75 per cent and 99 per cent of the original land. It is well known that exchange has to occur extensively if any real results of consolidation work have to be achieved and from

this point of view it can be stated that the work was almost a complete failure.

The National Commission of Agriculture has pointed out, "At a number of places it is noticed that influential sections of the village have taken forcible possession of the plots allotted to weaker sections as habitation sites. There is no agency to restore possession of such sufferers. Litigation in civil courts to get back the possession is beyond their reach. A major weakness of the programme was that consolidation was done without taking effective steps to ensure security of tenure to the tenants, particularly share croppers".

The Fifth Plan document also admitted, "A major weakness of the programme was that consolidation was done without taking effective steps to ensure security of tenants particularly share-croppers. As a result consolidation of holdings has often led to large scale ejectments of insecure tenants".

Aside from the injustice done to small and weaker sections of farmers; the potential of the consolidation work in speeding up agricultural development has also not been adequately realised. As an official review admits, "The consolidation process has never been treated as an integral programme of development of the village. . . . formal recognition appears to have been given to the desirability of associating irrigation and public works organisations for this purpose but the requisite degree of emphasis on programmes which would have made a substantial impact on agricultural improvement has been lacking".

Vicious circle of poverty

Economist Ranjit Sau has summed up the deteriorating plight of the rural poor in these words ('India's Economic Development—Aspects of Class Relation—Orient Longman Limited).

The distress of agricultural labourers gets accentuated under four different circumstances :

(a) When the composition of foodgrains output changes

in favour of superior varieties, and the production of relatively inferior crops shrinks : this has happened in India as the coarse cereals and pulses have stagnated or declined.

- (b) When the real wages fall, the agricultural labourers of India are facing this situation.
- (c) When the number of days of employment falls ; this might be happening in India in recent years.
- (d) When food production is reduced in absolute terms due to unfavourable weather, natural calamity or some other reasons ; a year of bad harvest is usually accompanied by (b) and (c) also : agricultural works are reduced and wages decline. In India, fluctuations in output of foodgrains as a whole indeed increased during 1961-71 in comparison with the earlier decade, though later production has relatively stabilized.

“Vast masses of rural poor in India are thus being increasingly exposed to a precarious situation as the above-mentioned four conditions have combined as if with a vengeance.

“The plight of small cultivators and agricultural labourers is poignantly brought out in the following table. Their meagre annual income is far short of the consumption expenditure, they take more loans than they can repay ; and so their indebtedness mounts through the years. The outstanding loan at the end of the year is between 2.5 and 3 times the net loan taken per year. Presumably the creditor settles the account every three years or so by swallowing up whatever little assets, including human beings, the debtor might have left with him. The vicious circle continues. In a situation of such poverty where would the purchasing power to buy foodgrains come from ”?

People are an asset

Above we have pointed out several reasons of hunger

**Income, Consumer Expenditure and Indebtedness of Small
Cultivators and Wage Earner Households, 1970-71**

Household	Annual income (Rs.)	Annual consump- tion (Rs.)	Annual deficit (Rs.)	Loan taken per year (Rs.)	Loan repaid per year (Rs.)	Net loan per year (Rs.)	Loan out- standing at the end of the year (Rs.)
Small Cultivator	1174	1488	314	172	42	130	335
Wage earner	1196	1332	236	106	32	74	210

Source : National Sample Survey (1976).

among farm labourers, share-croppers and marginal farmers. Now we will point out one factor that is often wrongly mentioned as a cause of hunger among them—the alleged large size of the families of the poor. In the present unequal system, it is a lie to say that hunger is caused mainly by high birth rate among the poor.

A recent socio-economic survey of six villages in the Aurangabad district of Maharashtra revealed that the pressure on the available manpower of the households of the weaker sections of society is so great that any presumption of there being more manpower than is economically feasible is wrong. The percentage of workers to the total number of people tends to decline as the size of the holdings increases, so that the work participation rate is highest (around 50.5 per cent) for landless labourers and small farmers (owning upto 2.5 acres), and between 22 and 32 per cent for cultivators owning more than 25 acres.

Among the labourers and the small cultivators, 76 per cent of the females are actively engaged in work while in the group of better off farmers, the figure is as low as 10 per cent. Also among the labourers and small farmers, 21 per cent of the children report for work, while among the prosperous group of cultivators the percentage of child labour is negligible.

The author of the study, Mr M.V. Nadkarni, concludes that “the small cultivators, together with agricultural labourers, find their manpower an asset—the only significant asset that provides them income rather than being a liability.”

Co-operatives that leave out the poor

Organising co-operatives of villagers for implementing various rural development programmes has for long remained an objective of the government as well as non-government development agencies. In agriculture, the co-operative movement did not attain much progress though for some crops like sugar cane the cooperative movement has attained strength in selected areas, specially in Maharashtra. In dairy-develop-

ment and to a lesser extent in forestry programmes, the co-operative movement has been able to advance much further.

Generally the organisation of co-operatives has been related to egalitarian objectives. After all, all members of the village community are free to become members of the co-operatives and gain from them. This view of cooperatives, however, ignores the fact that the ownership of land and milch animals in most village of the country is highly unequal, and in the existing exploitative power-structure the powerful elites want to perpetuate the poverty of the weaker sections so that they remain a source of cheap labour. In these conditions, it is hardly surprising that the agricultural, dairy, forestry or fisheries co-operatives in most parts of the country are dominated by the well-to-do and make hardly any contribution to changing the life of adivasis, harijans and other weaker sections of society.

Gujarat is a state where the co-operative movement is propagated to have made giant strides in the areas of forestry and dairying. During a recent visit to this state I tried to examine how far this cooperatives have benefited the mass of tribals and other weaker sections.

As in other tribal parts of the country, forests play an extremely important rule in the life of the tribals in Gujarat but these forests have been fast vanishing in several adivasi areas. In many areas these forests have been cleared for meeting industrial requirements by the cooperative societies. The forest cooperative societies have been generally praised as an instrument of helping the tribals. It has been generally claimed that Gujarat is different from other parts of the country where forests have been exploited by the contractor system. By organising the cooperatives it has been assured that the profits from the exploitation or forest wealth accrue not to a handful of contractors but to the tribal population. In fact things have not worked out this way.

In the prevailing power structure and without any significant efforts at organising the adivasis, the cooperatives in most

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cases have passed into the hands of a few resourceful people, who have used the name and thumb impressions of the tribals to corner all the benefits for themselves. It may not be called the contractor system but under this type of cooperative system the result in most places is the same - rapid destruction of forests for self benefit. In some cases the elites who control the cooperatives also come from the tribal community but they are alienated from the mass of tribals and do not hesitate to oppress and exploit them in the way the outsiders do.

Thus despite the existence of cooperatives the only way in which the poor tribals have earned something from the exploitation of the forests is by working as forest labourers at low wage rates. Although the official wage rate is Rs. 8 they are generally paid only Rs. 4 per day, although the signature or thumb impressions is obtained for the full amount. This non-payment of the minimum wages also brings fabulous profits for these in control of the cooperatives.

Moreover, despite the long tradition of the working of forestry cooperatives the ordinary tribal still lives in awe of the petty employees of the forestry department who often harass them for food, drinks and other exhortions. Sometimes they are implicated in false cases of theft of forest produce while the real thieves get away scot free.

Similarly there are double standards regarding the provision of forestry produce for the large scale industrialists and the cottage scale industries run by the tribals and other poor people. The big industrialists get the forest produce at a much cheaper rate. The cottage scale workers have to run from pillar to post to get the small allotments of forest produce, specially bamboo, and often despite their best efforts they fail to get the bamboo needed by them for working throughout the season.

The experience is not much different in the case of the dairy cooperatives. Even in Kheda district, which is the heartland of the dairy cooperative movement in the country, there is not much evidence that the poor have gained significantly from the dairy cooperative movement.

In this context the findings of a recent study 'Role of Milk Cooperatives in Articulating Rural-Urban Interaction Experience in Gujarat' make interesting reading. This study was made under the supervision of Prof. Vimal P. Shah of Gujarat University, Ahmedabad, 1980, and is based on a sample survey of 599 respondents selected from 2 villages each from 3 talukas of Kheda district (a total of six villages).

As many as 50 per cent of the villagers, this study found, are landless. And only 20 per cent of the landless families sell milk. Among the landless families, most of the milk selling families belong to the middle castes and not to the low castes. Among the Hindu middle caste landless households, a little more than one-third sell milk while among the backward caste landless families, only 9 per cent sell milk.

The conclusion of this study regarding the benefits to the rural poor are significant. To quote, "the house listing data collected in a survey of six villages from this district indicate that the dairy cooperative movement has not as yet succeeded in any significant manner in its larger goal of inducing the landless weaker sections to take up production and sale of milk. The advantages of the development of milk cooperatives seem to have accrued mainly to the land holders and the landless but middle class Hindus. The cooperative movement has not been able to significantly modify the traditional relationship between milk production and land holding. The landless who take up dairying seem to face a formidable problem of cattle feed, green fodder is not available to him because of he does not have land, and the relatively high price of the compounded cattle feed adds disproportionately to his costs of milk production. Again, when the purchase of milch animals is financed through a financing agency, the regular payments of instalments leaves only a small amount in his hands, and therefore, he does not seem to consider dairying adequately remunerative".

This study also states that although the dairy cooperatives organise several extension programmes for their members, they presumably do not reach out to the majority of the members.

The active functionaries of the village milk cooperatives come from the upper strata.

Another study of Sumul Diary Cooperative in Surat district was made by Mr. B.D. Desai for the Centre of Social Studies. This study was carried out in three talukas of this district between September 1978 to April 1979. In three villages selected from the three talukas for this study only 8 landless families out of a total of 358 landless families in the villages were found to be members of the cooperative. One of the conditions for getting a loan from the milk cooperative was to own a peice of land that could be mortgaged or to find a guarantor who owned land. Without land and investment it is extremely difficult for the landless to take to dairying. And even for the landless farmers who had managed to enter into the milk cooperative it was a precarious occupation and they were not sure whether they will retain it.

The weak helping hand

Acknowledging the several disadvantages suffered by small and marginal farmers, and the fact that the official agricultural development programmes were not benefiting them to a significant extent, separate programmes for benefiting small and marginal farmers were started in the Fourth Plan (1974-78) in the form of Small Farmers Development Agencies (SFDA) and the Marginal Farmers and Agricultural Labourers (MFAL) agencies with the "specific objective of ameliorating the economic conditions of small and marginal farmers and agricultural labourers in the country and to bring them into the mainstream of economic development". This objective was to be achieved by giving them subsidy and loans for purchasing agricultural inputs and for 'subsidiary occupation like dairying and poultry and in some other ways.

A study of the implementation of these programmes made by the Project Evaluation Organisation (PEO) of the Planning Commission has identified several important problems. One of the criticisms was that very few agricultural labourers were identified for help under the programmes. In nearly one fifth of the MFALs examined by PEO not more than 5 per cent of

total agricultural labourers in the areas had been identified and in another one-fourth the percentage of the identified labourers ranged between 11 and 15 per cent. In three projects areas this group was not identified at all. Agricultural labourers were also totally neglected in the matter of credit. Their share in total loans advanced till 1978 was about one per cent.

Specifically regarding the dairying component of these programmes the PEO study noted, "the manner in which the programmes were executed shows that most of the project agencies had failed to grasp the import of the guidelines. Generally they neither exercised proper care in selection of beneficiaries nor in ensuring the existence of supporting facilities which were crucial for successful working of the programme".

The most shocking finding of this review was that selection of inexperienced beneficiaries or unsuitable animals for distribution in the area and lack of extension services often led to animals becoming a liability rather than an asset.

The performance of 31 per cent of the MFALs and 40 per cent of the SFDAs was classified as 'poor' in this study.

The Sixth Five Year Plan concluded that the SFDA-MFAL programmes "were reduced to mere subsidy-giving programmes shorn of any planned approach to the development of the rural poor as in-built process in the development of the area and its resources".

Food for work, often too little food

Food for-work programme was started during the seventies to provide wages in the form of food to workers employed in relation of various 'permanent assets' in rural areas in the form of roads, bunds, soil conservation works etc. The scale on which this work was organised was stepped up substantially during 1979-80, and helped to some extent in reducing the starvation conditions. However there were widespread irregularities at the work sites, and on visiting various relief work sites at the peak of the drought period in Banda district of

Uttar Pradesh I also noticed that at some sites several workers had not been paid their wages for a long period, and were working all day in intense heat on empty or near empty stomachs. A report from Madhya Pradesh (Mainstream, April 19, 1980) said "A water tank was being repaired near Kumari village of Patera block in Damoh district of Madhya Pradesh. The workers employed here under the Food For Work Programme had not been paid their wages for 15 days.

"Emaciated men, women and children were digging up earth and carrying it some distance. So weak were their bodies that it seemed surprising that they had been doing the work all day long ; and no one, least of all the labourers, would have been surprised if one or more of them had collapsed at the work site.

"After working hard all day, they had been forced to eat dried berries and had prepared for hard work the next day on this diet. Finally, at the time of wage-payment, instead of the prescribed quantity of foodgrains, each worker was paid a measly thirty paise per day and told this was all that could be expected for the time being".

The various irregularities in the implementation of the food for work programme were highlighted in a report by Prabhu Chawla in India Today (May 16, 1981) :

"This game of exaggerated claims and impressive figures has proved to be an expensive one. There are glaring discrepancies between the amount of foodgrains utilised by state governments and the number of mandays of employment generated. By the end of 1979-80, over 37.32 lakh tonnes of foodgrains were released. At the rate of 2.5 kgm. of wheat per head per day—the rate fixed by the government - employment of 150 crore mandays should have resulted. But according to state government figures it amounted to only 90 crores mandays—a shortfall of about 40 per cent. Admits a senior official in the Agriculture Ministry : "There is no connection between the amount of employment created and the consumption of foodgrains. There is massive pilferage of stocks".

“The extent of bungling is acknowledge to be massive - according to one official estimate 30 per cent of the foodgrains released have found their way into the hands of contractors and fair price shop owners who are politically connected. A Central Government audit report only confirms the rampant corruption. It reads : “In the five states of Rajasthan, Kerala, Assam, Andhra Pradesh and Orissa, the contractors were given foodgrains after the work had been completed and they sold it in the black market”..... Resources of the programme have been used for renovation of junior officers quarters, police line buildings, court rooms and a superintendent engineers’ office building. But the classic instance involved the purchase of utensils and crockery for inspection bungalows - meant for government officials while on tour - in Bijnor Janupur districts out of FWP funds”.

The Employment Guarantee Scheme (EGS) in Maharashtra provides in India the best available example of a large scale, long term rural employment work which has been providing some sort of a subsistence wage to lakhs of workers. However even Maharashtra is far away from ensuring that every family meets its minimum food needs. An article in EPW pointed out (April 12, 1980) :

“On an average, the EGS worker worked for 160 days a year for about Rs. 3 a day. Wheat distribution on EGS, through the Food For Work Programme raised the wages to Rs. 4 a day.

“In spite of EGS, however 90 per cent of the house-holds of EGS workers lived below the poverty line”.

Sudip Mazumdar reported in the Indian Express (June 22, 1982—Transferred for unearthing corruption) “A district collector who unearthed large-scale corruption in a Maharashtra employment scheme and started taking action against the culprits, has been summarily transferred to an obscure place.

“Mr. Arun Bhatia, the young collector of Dhulia district, who detected 42 cases of irregularities in the multi-crore Employment Guarantee Scheme (EGS), was two days ago

ordered to quit his post by the Chief Secretary Mr P.G. Gavai, according to Mantralaya sources.

“Dhulia, a backward district, inhabited mostly by tribals, is drought prone. Official records show that last year about 80,000 labourers were given work in Dhulia and a huge sum of Rs. 5.5 crores was spent on them.

“Mr. Arun Bhatia, who took over as collector in April last year, discovered that the overseers of various departments entrusted with the works had eaten up large sums of money, and set up investigating teams.

“A random sampling of work sites spread all over the district brought out the startling fact that there were hundreds of bogus names listed in the muster rolls, Another method of expropriating government money by the overseers was to obtain false signatures of thumb impressions and pocket the money.

“In some cases real names were entered in the muster rolls but these people were not given any work. The money went to unscrupulous officials and their patrons in high places.

“Illiterate villagers who actually worked on certain projects were duped. Their thumb impressions were obtained against a particular sum but they were paid much less.

“The collector’s teams found at some work sites, like Khordad village, muster rolls only with signatures and thumb impressions. Columns like ‘name’ and ‘amount paid’ were left blank to be filled up later.

“Mantralaya sources say that the investigating teams established prima facie cases and named the officials involved. In December 1981, the collector filed 42 FIRs at various police stations.

“Mr. Bhatia had started collecting evidence in June 81. He faced opposition immediately. He was asked to stop his “activities” by a Central Minister who rang him up from New Delhi.

“Undaunted Mr. Bhatia went ahead. He soon discovered that the police with whom the FIRs were registered were not enthusiastic about investigations and prosecution. On the contrary, the police started defending the culprits. In Vardhana village, sub-inspector Mali called some labourers and warned them not to tell the truth.

“In Bandarpada village, sub-inspector Qadri sat in a guest house while the officials accused of corruption brought prosecution witnesses to depose before him.

“Sources say that when the collector asked the Government’s permission to prosecute the officials in these 42 cases, the departmental heads suggested ineffective departmental proceedings.

“The collector asked the departmental head to at least transfer the accused officials so that they could not tamper with the evidence or influence the witnesses. The transfer orders never came. Instead Mr. Bhatia was sounded about his own transfer.

In a later Economic and Political Weekly article (November 6, 1982) attention was drawn to the deteriorating conditions at these work sites.

“In 1978 EGS workers were paid one kilogram of jowar as part of their wages and there was a ‘progressive element’ whereby a worker could get more grain as part of his wage for a greater amount of work. Later the proportion of grain in the EGS wage had come down to half a kilogram and the ‘progressive element’ was abolished. The new government scrapped the half kilogram and gave workers a coupon worth 0.25 paise which was to be redeemed in ration shops on grain purchases. Since the prices of coarse grains have been increased in ration shops, this coupon is really worth 0.05 paise”.

Latest promises—rural poor and the sixth plan

Whether conveyed through populist slogans like *garibi hatao* (remove poverty) or expressed in the formal language of Planning Commission documents the importance given by the

government to the removal or reduction of rural poverty has always been well publicised. The Sixth Plan document does not care to answer in clear terms why despite all these good intentions, according to official statistics still over 250 million people live below the poverty line in Indian villages (i.e. have a per capita per month income of less than Rs. 65 in 1977-78 corresponding to the minimum daily calorie requirements of 2,400 per person). All that it does is to point out a few shortcomings of some of the programmes aimed at improving the plight of the rural poor. By removing some of these shortcomings and integrating the various programmes it is hoped the Sixth Plan will significantly reduce the 'incidence' of rural poverty.

The main programmes aimed at helping the rural poor are land reforms, Integrated Rural Development Programme, (IRDP), and the National Rural Employment Programme (NREP). Nearly Rs. 2,300 crores have been sanctioned for these programmes from Central Government expenditure. Here it may be pointed out that according to the past indications of the expenditure on subsidies, rich farmers may be benefited to this extent on account of fertiliser subsidies alone (at the rate of fertiliser subsidy of Rs. 450 crores per year).

Of the 25 crore rural poor nearly half may be classified as very poor i.e. those who cannot afford even 1800 calories per day. They consist mostly of marginal farmers, share croppers and above all the landless labourers. All past experience tells us that massive spendings on various rural development works such as irrigation (Rs. 10,000 crores in the Sixth Plan), crop husbandry research (Rs. 1,800 crores) agricultural marketing and food storage and warehousing (Rs. 437 crores) leaves these people more or less untouched. Their only hope lies in land reforms, IRDP and NREP.

While independent India's performance in the field of land reforms has been extremely dismal on the whole, at least the government has always been paying lip sympathy to extensive land reforms and so occasionally in important official documents we at least read about some radical programme of land reforms. The two page section on land reforms in the 463

page Sixth Plan document, however, is one of the most dismal official publications in this field. While lamenting the poor performance in this field in the past, the authors of the Plan document have no solution other than enacting still more land reform legislation. Organisation of the landless and the government's policy towards such organisations are not even mentioned. No attempt has been made to find out the full potential of land redistribution measures that still exists in the rural economy. Even if the specified objective of distributing the land already declared surplus is fulfilled it will at the most confer marginal benefits on less than two million landless families. The same document states elsewhere that the top 30 per cent of the rural families own 82 per cent of the assets while the lowest 30 per cent own only 2 per cent of the assets, and yet in the chapter on land reforms hardly anything is said about the redistribution of these assets for helping rural poor.

So while a radical redistribution of resources is not envisaged by the Sixth Plan, in order to make it presentable and in conformity with the stated objectives and promises of the government, somehow it has to be shown that a significant reduction in rural poverty can still be achieved. Hence the IRDP and the NREP.

At the block level, it is proposed that out of the estimated average of 11,000 poor families in each block, 3,000 of the poorest families will be assisted under IRDP. How these poorest 3,000 families will be identified is not very clear. In the five years of the plan Rs. 35 lakhs will be made available for each block. If this money actually reaches the poor beneficiaries, each of the 3,000 beneficiaries will be benefited to the extent of about Rs. 1,150, inclusive of the overhead charges which are always substantial in such programmes. However at the national level if the same block level target of benefiting between one-third to one-fourth of the poor families under the IRDP is to be achieved, this will involve helping nearly 15 million families with a total allocation, including central and state expenditure, of nearly Rs. 1,600 crores (i.e. about Rs. 1000 per family).

While the IRDP beneficiaries will be mainly the marginal peasants, the reduction of the poverty of the entirely landless wage labourers is sought to be achieved by the NREP. Nearly Rs. 1,700 crores provided for the execution of various development projects under this programme are expected to lead to the creation of nearly 350 million mandays of employment on an average per year during the plan period. In view of the fact that seasonal unemployment for landless labourers in our country is rather prolonged, we may assume that employment extending over about 3 months will be able to make a significant dent in a wage earner's capacity to raise himself a little above the poverty line. This would imply that this programme will be able to help nearly four million landless labourers, not a significant number. Moreover a permanent improvement in their standard of living will be brought only if the work on which they are employed gives them some permanent gain in the form of higher earning capacity. This is most unlikely judging by the past experience of all such Projects.

The Sixth Plan document proudly says, "Alleviation of rural poverty will be the primary objective of the Sixth Plan". These are empty words, and judging from the facts mentioned above it is most unlikely that a significant reduction in rural poverty is possible during the Sixth Plan period.

Already there are indications that the coverage of the IRDP may fall short of the intended targets. The Economic Scene reported recently (November 1982), "Although the expenditure incurred by the Government on the IRD Programme has increased over the years, it is still short of the target. In 1980-81, the expenditure amounted to Rs. 150 crores against the target of Rs. 300 crores. Similarly in terms of beneficiaries, although there was a marked increase in coverage, the achievement of the target appears elusive. An important feature of the IRDP is the provision of subsidy which each beneficiary gets from the government. While this facility is a great boon to the poor beneficiaries, the subsidy has become a source of corruption in the hands of officials in charge of sanctioning it. . . ."

A journalist Arun Ranjan recently wrote a report on the

implementation of these programmes in East Champaran region of Bihar (published in Ravivar). In this report he says that for earthwork of 1000 cubic feet the official wage rate works out to about Rs. 80 while in fact the workers are paid Rs. 25 to Rs. 30. The remaining money is divided between engineers, contractors, overseers, clerks etc. While the contractor system has been eliminated on paper, it continues to flourish in practice. At most of the 'work-sites' hardly any work is being done. This report cites letters written to the Chief Minister from social workers of this area which point out all these irregularities.

The 19th report of the Public Accounts Committee has identified many shortcomings in the implementation of NREP. It has pointed out that the NREP has been launched in many areas without carrying out any specific surveys of the scale and magnitude of rural unemployment, and no efforts have been made to draw up projects based on the needs of the concerned rural community. Grain allotted to by the Centre under the programme has not been fully utilised by the states. Supplies of grain to many states were severely affected by inadequate rail movement from Haryana and Punjab to far-flung states. In the distribution of grain to the labourers some malpractices have been observed, including large-scale pilferage of grain, malpractices by contractors, poor quality of grain, delay in payment due to inadequate arrangements for assessment of work, and sale of grain in the open market.

In employment generation, the performance of NREP has been far from encouraging. In the three years ending 1979-80, it generated 98 million mandays of employment against the anticipated 149 million, a shortfall of nearly 34 per cent. During 1981-82, the Centre had allocated 311,000 tonnes of grain for the programme, out of which only 1,63,000 tonnes were utilised by the states.

Latest reports from rural areas indicate that the NREP is working now on a much smaller scale than envisaged in the Sixth Plan and the foodgrains component of the payment is not being given at several places. This has happened despite

the prevalence of severe drought conditions in a large area of the country.

The low allocation, and even the lower actual spendings, on programmes meant for the rural poor should be contrasted with the government's massive spendings, at the time of financial stringency, on extravaganza like the Asian games of 1982. While estimates of the actual budget of these games vary almost everyone agrees that there was a lot of wasteful spending and corruption. Non-official estimates of the costs of the games have ranged from Rs. 3500 to 10,000 million or even more. According to a report on Asian games by the People's Union For Democratic Rights, "Asiad 82 has cost the country Rs. 361 crores (according to the government's own admission) an amount which could be provided for the construction of houses for about 4 million of the 14.5 million landless labourer households who would need housing assistance by March 1985 or for special nutrition and midday meals for over 30 million children during the 1980-85 Sixth Plan period".

According to an estimate by prominent news magazine 'India Today' nearly 60 per cent of the total budget of the games was spent on luxury hotels (ironically most of these hotels were not even completed in time for the games though several millionaires added further millions to their coffers by obtaining land and contracts at dirt cheap rates in the name of Asian Games. Further, the Asian Games were also used as a pretext to import colour TV sets and technology, the latest delight of the Indian elites).

Latest promises, latest comment. Business Standard (30-5-83) writes in an editorial on IRDP, "It is ironical that despite the Sixth Plan's much flaunted emphasis on the elimination of rural poverty, its programme remains to get off the ground even as the plan period is rapidly approaching its end. While a substantial part of the responsibility for rural non-development lies in the programme's structural deficiencies, misuse and the tardy release of funds have handicapped the pace of development. Reportedly, the centre has withheld allocations amounting to Rs. nine crores to 17 states and

Union Territories for NREP in the current year. Actuals indicate that if anything, bank lending to priority sectors perceptibly slowed down in 1982. According to R.B.I. (Reserve Bank) estimates, lending to beneficiaries of IRDP during the past two years held the dubious record of achieving only around 50 per cent of financial targets. So much for efficiency commitment towards rural upliftment. What however appears to be an infinitely more ominous trend, and which correctly underlines the RBI's concern, is the fact that concessions offered by banks are being exploited by inappropriate sections of rural society. More often than otherwise, the concessions would appear to have been monopolised by the richer sections of rural society'.

Our precarious food system

'Imports of wheat after a gap of several years', 'High fertiliser imports to continue', 'Massive import of edible oils', 'Sudden increase in gifted imports of milk powder,' Government admits widespread hunger in country', 'A big cut in foodgrain allocations for rural employment works', Food grain subsidies may be reduced', 'Heavy damage, of wheat crop by disease,' 'Contamination of imported wheat'—newspaper headlines proclaiming this and other aspects of the food situation in the country have become increasingly frequent in recent months. Proud statements proclaiming the country's success in the so called 'self reliance in foodgrains production' have given way to increasing concern about the precarious food system in the country.

While agreeing with the concern voiced by these headlines in recent months, however, it should be pointed out that much of this concern should also have been expressed during the so called years of plenty during the last decade when the country was not importing any foodgrains as even then foodgrains situation was not at all as secure as it was made out to be by official sources. In order to be self-reliant in food grains production a country should not only not import foodgrains but in addition it should be able to meet the minimum nutrition requirements of its entire population. Since according to

official sources even during the years of plenty there was widespread poverty and hunger in India it cannot be said that India was self reliant in foodgrains during those years. If only the poor people had the purchasing power to buy foodgrains the demand for foodgrains would have been so high that the country's production may not have been adequate to satisfy this demand.

Moreover the country has depended critically in recent years for whatever increases in agricultural production it has been able to achieve on imported chemical fertilisers (or fertilisers manufactured within the country with imported machines and technology). During 1980-81 (provisional statistics) the country imported nearly 1510 thousand tonnes of nitrogenous fertilisers, 452 thousand tonnes of phosphatic fertilisers and 797 thousand tonnes of potassic fertilisers. Thus even the limited self-reliance achieved in recent years (relative to the even higher imports of earlier years) has been illusory.

Moreover in recent years due to the introduction of new crop varieties which are more susceptible to disease our cereal crops have become much more exposed to pests and diseases some of which were almost unknown till a few years back. Another reason for the higher pest and disease susceptibility of crops is that our agriculture is now increasingly becoming a monoculture i.e. vast areas are planted with a single variety of crop (in traditional agriculture a number of varieties were planted so that if one proved susceptible to a particular disease the other survived).

Recently a task force on rice breeding headed by the famous rice expert Dr. R.H. Richaria concluded'', The introduction of high yielding varieties has brought about a marked change in the status of insect pests like gall midge, brown plant hopper, leaf folder, where moggot etc. Since most of the high yielding varieties released so far are susceptible to major pests with a crop loss of 30 to 100 per cent, development of high yielding varieties with built in varieties has become highly essential to stabilise the yields''. Elsewhere this same expert noted,

“Most of the (paddy) high yielding varieties are the derivatives of T (N) 1 or IR 8 and therefore have the dwarfing gene of deo-geo-woo-gene. This narrow genetic base has created alarming uniformity causing vulnerability to disease and pests”.

In the case of wheat, the second most important food crop in India, the National Commission of Agriculture had to say this in its 1976 report, “India is in a vulnerable position in regard to devastating and debilitating epidemics because of the very few varieties with very narrow genetic base which are under cultivation at present. Two varieties viz. Kalyan Sona (or its red grained sister line PV 18) and Sonalika are most widely grown in all parts of India. In Punjab 90 per cent of the HYV area was under Kalyan Sona or PV 18 in 1972-73. The same position exists more or less in other wheat growing states. The hills of North India which form the foci of infection for yellow and brown rusts also have large areas under Kalyan Sona and Sonalika. This unplanned cultivation of Kalyan Sona in the hills has led to the multiplication of races to which Kalyan Sona is susceptible. Continued cultivation of Kalyan Sona and Sonalika in the hills is fraught with grave danger. Experience in other countries with wheat, maize and other crops has clearly shown the need for diversification of genotypes for resistance to major diseases. Work has to be intensified to introduce diverse genes for resistance in the commercial wheat varieties”.

These remarks of experts, significant as they are, were made some time back. So consider some more recent data. One lakh tons of certified wheat seed was earmarked for production for the 1977-78 winter (rabi) crop season. Out of this just one wheat variety sonalika took 65000 tons and another Kalyan Sona 20000 tons.

In recent rabi crop serious damage was caused by the Karnal Bunt (*Nevossa Indica*) a fungi disease in the wheat bowls of Punjab and Haryana. The threat of this disease was reported in earlier years but this wheat variety, whose very introduction was shrouded in bitter controversy with some prominent scientists opposing its introduction, was not withdrawn from circulation.

Pulses have traditionally been the most important source of protein for the poor people in our country but the per capita per day availability of pulses has steadily declined from 70 grams per day in 1956 to 39 grams in 1981. Vegetable oils have also been an important source of protein as well as of fats, for the masses but production of oilseeds has been stagnating and it has been possible to meet domestic needs only by massive imports of edible oils, estimated to be of the value of Rs. 568 crores during 1980-81. Moreover the availability of pure vegetable oils has been becoming more and more scarce, and instead the trend is rapidly towards the use of hydrogenated oils. The process of hydrogenation changes most of the unsaturated and poly-unsaturated fats into saturated fats. While the unsaturated fats and specially the poly unsaturated fats have important nutrient values excess of saturated fats can lead to several health problems.

In the coastal areas where fish has been the traditional source of protein for the masses, this is getting more and more out of the reach of the poor as the country's fishing industry is oriented more and more to meeting the export requirements and the small fishermen become the victims of the inroads of trawlers in the water zone meant for them. In the case of milk reliable statistics regarding the nationwide production and consumption trends are hard to obtain, but despite ambitious programmes of dairy development it has not been possible to reduce the dependence on imported milk products (the only difference is that before the mid seventies all our milk product imports were gifted). Similarly in the case of fruits and vegetables reliable statistics on total production and per capita availability are difficult to get but on the whole the research work has not succeeded in significantly increasing yields at the field level. Also the stranglehold of a chain of middlemen has ensured that the consumers have to pay a high price for vegetables and fruits while the producer does not get the necessary incentive for raising production in the form of a remunerative assured price.

Coarse cereals like bajra, jowar ragi and other lesser known

cereals grown by tribals constitute perhaps the most important group of crops from the point of view of the poorest people of the country. Predictably it is these crops which have been most neglected in our country. Attempts to raise production of jowar and bajra through the extension of new high yield varieties of these crops have run into problems due to, among other factors, the high disease susceptibility specially of the new high strains of bajra. Another problem is that while trying to improve the yields of these crops scientists have not given enough attention to the fact that these crops have to be grown by and large in rain fed conditions. Moreover in recent years the minor coarse cereals are being diverted for the growing livestock industry thereby further accentuating the foodgrain shortage among the poor. National Sample Survey data indicate that the nutrition situation, including calorie intake, in the mainly coarse cereal consuming regions, has been deteriorating in recent years.

The minor coarse cereals grown by the tribals have received almost no attention of scientists and development officials. Due to the growing deforestation in tribal areas which indirectly reduces the fertility of land it is likely that the yields of these cereals has been declining. In the past tribals used to survive the worst drought years by living on the fruits, roots and other edibles found in the natural forests but with the steady depletion of these forests this source of food is also fast diminishing.

Overall foodgrains production has stagnated in recent years, and the food-stocks with the government have been decreasing.

As the Economic Times noted on April 13, 1983, "During the short span of (last) four years, the aggregate stocks of foodgrains have declined from 17.5 million tonnes to 12.7 million tonnes (well-below the 15 million tonnes considered the minimum necessary in the Sixth Plan). While in the case of wheat, the rundown of stocks has been partly mitigated by imports, the situation regarding rice is very unsatisfactory. The stocks of rice have fallen from 9.05 million tonnes to only 5.34 million tonnes during the same period".

Wasted water

One of the most disappointing features of the Indian effort to increase farm output has been the low returns that massive investments in major and medium irrigation projects have yielded.

In terms of investment, Rs.12,370 million were spent on the development of major and medium irrigation projects during the Fourth Plan, and nearly double that amount (Rs. 24,120 million) in the Fifth Plan. The Sixth Plan aims at a massive increase in the potential as well as utilisation of major and medium irrigation projects. The utilisation of major and medium irrigation potential has been planned at 5.6 million hectares during the five-year period. For this an outlay of Rs. 84480 million has been proposed in the plan.

Even while committing so much money to the major and medium irrigation projects, the Sixth plan document points out that the returns from the massive investment made in irrigation are very disappointing. While irrigated land should yield at least four to five tonnes of grain per hectare per year, such yields have been achieved only in experimental and demonstration plots; elsewhere the average yield is hardly 1.7 tonnes per hectare per year.

These irrigation projects are unable to recover even working expenses in most of the states. It has been estimated that at an average the states lose more than Rs. 4,270 million a year on their irrigation investment.

According to the latest estimates, nearly six million hectares are affected by waterlogging, 4.50 million hectares by saline soils. A good part of this damage has been caused by large scale seepage and waterlogging from improperly planned surface irrigation projects.

Some major irrigation projects have been lingering on for about 15 to 20 years. To mention some - Nagarjunsagar project (Andhra Pradesh), Gandak and Kosi projects (Bihar), Mahaprabha project (Karnataka), Kallada project (Kerala), Tawa project (Madhya Pradesh), Rajasthan Canal project and Kangsubati project (West Bengal).

Apart from delays in completion of major projects, there are delays in utilisation of the created potential. As an official review admits, in most of the projects there have been long delays in construction of field channels, and water courses, land levelling and land shaping.

The inefficiency emanates basically from the tendency to foist projects on people, instead of involving them in their planning and execution. How else can one explain the hurry to draw out plans for more and more projects and get funds sanctioned for them, while the work necessary to utilise properly the potential of existing projects remains neglected for a long time? Is construction of dams and canals an end in itself, or are these a means to raising production and fighting hunger?

After a close look at the way major and medium irrigation projects are executed in our country, it is impossible not to suspect that these are oriented merely to the requirements of construction companies and the vested interests in bureaucracy and politics. At an international level, such projects have been promoted in developing countries more to benefit big business interests than poor farmers.

The construction of the World Bank-funded Tarbela dam on the Indus river in Pakistan, a project which had contributed more than its share of disasters, had involved "probably the largest ever civil engineering contract to a consortium of Italian and French firms, subsequently joined by German and Swiss partners".

After several misadventures with big projects, former World Bank President Robert McNamara was himself constrained to remark. "There are far too many cases in which it has taken ten years or more after the dam was completed for the water actually to reach the farmers. Major irrigation schemes often pre-empt necessary resources for no-farm improvements. The drama of harnessing a major river may be more exciting than the prosaic task of getting a steady trickle of water to a parched hectare, but to millions of small holders that is what is going to make the difference between success and failure".

Recently, B.B. Vohra, senior environment official who had earlier served in the Agriculture Ministry, commented on the existing orientation of irrigation officials.

“One of the reasons why Irrigation Departments have become almost compulsive builders of dams and latterly (because dam sites are becoming increasingly scarce) the dreamers of Garland Canals, water grids and other similar fantasies, is the fear that they would find themselves out of work when existing projects get completed...However, such fears are completely unfounded if we take into account the formidable size and scope of the engineering work which needs to be carried out in the existing command areas in order to achieve their full productive potential”.

More than any other example, the recent experience of the Tawa Project should open the eyes of our engineers and planners to the sad realities of our major irrigation projects.

The yields per acre for Hoshangabad district after the introduction of irrigation (for instance, during the years 1977-78 and 1978-79) have shown some decline compared to the yields obtained before the irrigation scheme was implemented (for example, in 1971-72). In other words, crores of rupees were wasted because of the poor planning of this massive project. As the summary report of the Comptroller and Auditor General of India for the year 1979-80 admits, “According to the scientific and technical opinions now available, because of the soil and weather conditions in the command area of the Tawa Project, agricultural operations in both Kharif and Rabi seasons with the help of irrigation could not have been productive. On the other hand, irrigation could have even been harmful...Thus, it would appear that the project was not well conceived and the benefits that were presumed could not have been realised. This would also indicate the need for a second look at the programme for the development of the command area so that further unnecessary and wasteful expenditure could be avoided”.

In fact several big dams have proved to be more harmful than beneficial. While their intended benefits will last for a much lesser period than what was originally planned due to the high siltation rates, already destructive floods are being unleashed due to their reduced storage capacity, deforestation in the catchment areas and other factors.

Meanwhile lakhs of people, mostly poor villagers, specially tribals, are being uprooted from their homes to make room for dams and reservoirs. Similarly large scale mining and other development projects have uprooted a very large number of people. While in the prevailing power structure the ultimate benefits of these projects to the poor people of the country are suspect and uncertain the homes and livelihood of lakhs of people are being destroyed and they are not being properly rehabilitated. Here we examine the problem of these 'victims of development' in the context of the dam evictees.

Victims of development—Dam evictees

In Bamna Village of Sabarkantha district in Gujarat, almost all the land was owned by Brahmins who got the land cultivated by the harijans and other low-castes families. The ploughs, bullocks and other agricultural implements also belonged to these backward communities. When this land was submerged due to the construction of Hathmati dam, the Brahmins who never cultivated the land got all the compensation and many of them left for Bombay. The actual cultivators, however, received nothing and even their ploughs and bullocks became redundant in the new situation following the submergence of their cultivation land. Similarly the artisans, who lost their traditional customers, became unemployed.

An identical situation arose in the case of Dharoi dam in the same district. A big landlord who owned 910 acres of land managed to secure compensation at more than double the normal rate after going to court. After his 'eviction' he purchased two cars and 40 acres of land near Ahmedabad. A Bombay trader bought stony land in this area at Rs. 200 per acre just before submergence, dug a makeshift well and got

compensation at Rs. 4,800 per acre, the official rate for irrigated land. This trader later become a Deputy Minister.

These and other several cases of the 'evictees' villagers were brought to light in a recent seminar on 'Political Economy of Rehabilitation' organised at the Centre For Social Studies (CSS), Surat, Citing his experience of dams in Sabarkantha and Bharuch districts of Gujarat, a prominent social worker of this area Bhanu Adhvaryu noted, "the Government and the voluntary agencies participate in the work of rehabilitation, and ordinarily a lot of sympathy is displayed towards those affected by the construction of the dam. But they have no idea of the complexities of the structure of the affected society. Hence those who are well off take advantage of such sympathy to such an extent that their condition after rehabilitation is much better than what it originally was. The poor, on the other hand, face a much worse situation, as they become rootless".

Gujarat is among those states where dam construction activity is proceeding at a rapid pace, and as Vidyut Joshi, a CSS researcher said, the majority of dams in Gujarat are built in such places that tribals are losing their land, homes and employment, while non-tribals in the plans get the benefits of such projects. And according to another prominent social worker Mathew Kalathil, trying to properly resettle tribals used to meeting most of their needs from forests in a different setting away from forests is an almost impossible task.

In a comprehensive study of Ukai dam on Tapi river, a CSS researcher Kashyap Mankodi noted that as a result of this project nearly 52,000 people from 170 villages were uprooted. Before eviction all these people had been cultivating the rich alluvial land on the river banks where two crops could be grown easily without extra irrigation or fertilisers. The evictees were promised help in building wells, land improvement, removal of tree stumps and provision of electricity. "However none of these promised measures were actually carried out, resulting in a sense of betrayal". Regarding a lift-irrigation scheme started to help the evictees, "more than 14 years after the inception of this scheme and after considerable expenditure

had been incurred, it was still lying totally useless.....The hardships caused by the forced exchange of plentiful fertile land for small plots of poor quality land and lack of irrigation was further compounded by avoidable bungling.” Mankodi’s field research describes the sad plight of the evicted villagers who are forced to migrate in search of work.

In another paper G. Narendranath and K.R. Chowdhry described the no less tragic plight of the ever one lakh evictees of Srisailem dam in Andhra Pradesh. The cash compensation given to the evictees was much lower than what was deserved. The fact that compensation payments were not fair was demonstrated by the district courts whose verdict went in favour of the displaced persons in all the 416 cases decided by them. The procedure of acquiring land under the Land Acquisition Act is quite complex. It “demands a good amount of legal knowledge and most of the villagers who are illiterate are not even aware of the Act, not to speak of the subtle nuances involved in the legal interpretation. Hence the Act proved more harmful than useful to the people, particularly to the poor people”.

Left to buy land on their own by the little cash received as compensation, the poor villagers were deceived in various ways, and their life in the new settlements is pathetic. In the ‘Operation Demolition’ of March 1981, the belongings of the people were thrown out, cattle were let loose, houses were destroyed and people were hounded out in a big swoop. ‘Where to go’ was uppermost in their minds. Even temporary roofs were not available for shelter”.

It was stressed by several scholars who have studied this question in depth and several social workers who have involved themselves in the efforts to reduce the distress of the evicted persons that while lakhs of people have already been forced to desert their traditional homes to make way for the dam a satisfactory procedure has not yet been evolved to do justice to the people of these ‘sacrifice’ areas. And in view of the rapid pace of dam construction work in our country, this problem should receive the urgent attention of the government

to avoid further distress and discontent among a large number of people.

Disasters take increasing toll

The floods in Uttar Pradesh, Bihar and West Bengal during 1978-79 damaged 18 million hectares of cropped area, destroyed nearly 40 lakh hutments, and took a toll of 2,800 human lives and about 2 lakh cattle.

The drought conditions that prevailed in large areas of Northern and Eastern India in 1979-80 affected more than 38 million hectares of cropped area and brought distress to 13 million heads of cattle and over 200 million people.

These two sets of statistics given in the Sixth Plan Document reveal the magnitude of the damage done by 'natural' disasters in recent years. In human terms the misery wrought at the time of such disasters is much greater than what such cold statistics can ever convey. The real tragedy is that more and more money is being spent on controlling such disasters and, more and more area is being covered by protective measures and yet more and more people are being affected by them.

This fact is revealed most glaringly by the data relating to the expenses incurred on flood control and the damage done by floods in recent years.

Since independent India embarked on a planned development Rs. 970 crores have been spent on flood control measures (till 1980) and 11 million hectares of land have been, according to official data, provided protective cover from floods (till March 1980). Besides 264 towns have been protected and 4700 villages raised above the flood level by the end of March, 1980. Despite all this, according to the estimates given by the National Flood Commission, damage from floods has been steadily increasing over the past years. In fact it is shocking to learn from this Commission that damage at current prices from the floods during the four years 1974-78 (Rs. 3128 crores)

was greater than the damage during the previous twenty years (Rs. 3104 crores).

Again according to the National Commission of Floods, the losses on account of floods in 1976, 1977 and 1978 were Rs. 887 crore Rs. 1200 crores and Rs. 1091 crores respectively, or an average of Rs. 1000 crores per year. The Commission also pointed out that the total area subject to periodic floods is now about 40 million hectares, while in 1971 it was only 20 million hectares—an alarming rise of 100 per cent in 10 years.

During the 15 years period 1953-1978 on an average every year 9.25 lakh houses were destroyed every year by floods, 1240 human beings and 77,000 cattle perished.

What are the reasons behind this increasing damage from floods? Deforestation, it is now widely acknowledged, is the number one villain. In the course of the last three decades forests spread over 4 million hectares of land have been destroyed, and another vast acreage of forest depleted badly.

Deforestation leads to siltation of rivers and reduces the water carrying capacity. In addition reservoirs are also silted up rapidly reducing the life span as well as water carrying capacity, and leading to flash floods. It has been estimated that a large number of reservoirs in India have an actual siltation rate which is 3 or 4 times (or even more) of what was estimated at the time of their construction. As is well known the incidence of flash floods has increased greatly in recent years.

Deforestation apart, the tardy pace of the execution of several flood control projects must also get its share of the blame for our poor performance in the area of flood control.

It is also surprising to learn that despite the enormous money already sunk into flood control measures serious gaps continue to exist in our information system in this crucial area. The work of monitoring carefully ecologically crucial areas undergoing rapid degradation, or the dams and reservoirs

being silted up or adversely affected, has been sadly ignored.

While big dams are being constructed on some highly unfavourable sites concerned engineers lament the lack of detailed investigation work prior to undertaking the construction of big and hazardous projects.

Contractors undertaking the work of constructing bunds and other protective measures believe in spending the minimum effort on such construction, and occasionally in collusion with corrupt officials, leave big areas uncovered and the work is shown as being completed on paper. In the Dhaka block, Bihar, an embankment supposed to have been built in 1975-76 was latter found invisible for a stretch of six kilometres. The people approached the local legislator, whose enquiries in turn revealed that the embankment was shown in official records as having been completed, and a sum of rupees one lakh was earmarked for its maintenance.

Despite the fact that the task of building shelter belts of trees in areas exposed to cyclones in stressed time and again recently there have been some disturbing reports of the plunder of forests in the coastal districts of Orissa and of the suspected collusion of some officials in it.

A recent report in EPW describes the distress caused by faulty flood-protection work and corruption-ridden relief work.

“A tour of the flood affected parts by this correspondent confirmed many of these suspicions. In facts, many of the local people say that piecemeal flood control measures are doing more harm than good. For example, people cite the damage this year in Basti and Gorakhpur districts where a large number of bunds were breached resulting in flash floods causing greater damage than normal floods. It seems that because of the construction of many bunds very close to the river channel, the above mentioned problems have led to decrease in the water carrying capacity of the rivers in the region, whereas previously the flood waters used to spread over larger areas on both banks along the river thus spreading

the silt and sedimentation uniformly over larger areas, preserving the water carrying capacity. Again, the reason behind the Gaghra shifting its course near Chandpur in Ballia this year and nearly breaching the Turtipar-Srinagar bund, could be, according to the Executive Engineer in charge of saving the bund, the recent construction of protective bunds on the opposite bank of the river falling in Bihar state. In Gorakhpur district, large areas of traditionally cultivated land are getting water-logged in the kharif season rendering cultivation impossible.....One of the pressures and pulls exerted by the local big-wigs is in deciding the location of the bunds. Many times the location is changed to satisfy the self interest of influential figures on whom the ruling parties depend for their votes. Bunds are often left incomplet in many cases because of the objection of influential people who have their lands coming in its path, following their demands for higher compensation for the land to be acquired. Thirdly, following the opposition by people of new settlements on village bank not much margin of land is left between the river course and the position of the bund. Fourthly, the faulty materials used by the profit hungry contractors in the consturction works in many cases results in the breach of bunds even at lower flood intensity than their rated capacities.

This only confirms the suspicion of the local people that the ruling parties have a vested interest in not solving the flood problems in the region. In fact flood relief work has become just another channel by which those in power bestow favours on local interests aligned to them. Flood relief operations provide ample scope for politicians, officials and contractors to indulge in black marketing, diversion of funds, distribution of substandarised materials etc. and thus enriching themselves. This is an open secret as far as the local people are concerned, who can cite lots of such instances. During his tour this correspondent found that distribution of food and other essential items was far from satisfactory. They are distributed only in those villages from where local bigwigs of the ruling party hail. Even within a village, only those who have aligned with the bigwig qualify for receiving the ration.

The same story is repeated in the distribution of emergency flood relief money. The patwari and other officials recommend payment of a particular amount of relief money on the basis of the damages suffered by concerned persons. But more often only favoured persons with influence in the ruling party or government machinery actually get the money. In many cases the amount specified for a particular person on paper is not actually handed over, with the distributing officer pocketing a substantial fraction of the amount. In short, the whole flood relief operation year after year is only another exercise of influence-peddling by those in power, who use this to appease local bigwigs on whom they depend for their successes in election. This is not surprising since politics of power today in our country has degenerated to the level of using even the misery of common man as political capital”.

Thirst is worse than hunger

According to a recent report, out of the 33,305 villages in Rajasthan 24,303 have been categorised as problem villages following the criteria laid down by the centre regarding water supply. One of these 11,317 villages are such that either there is no water available or it is so brackish that it cannot be used for human consumption.

Western Rajasthan has been reeling under drought conditions for the last five years, the water-level in the few wells that exist has been steadily receding and the use of tankers and camel carts to carry water has been becoming increasingly necessary.

The desert conditions of Rajasthan make it the most difficult state from the point of view of the availability of drinking water, but in many other parts of the country also vast areas face serious problem regarding the availability of drinking water. For instance Andhra Pradesh has been trying to get foreign aid for a Rs. 750 million programme to provide safe drinking water to 1100 villages affected by flouride. Excessive flouride content in the water of these villages has been causing flourosis resulting in skeltal disfigurement of villages, patches

on enamel of their teeth, enlargement of or malfunctioning of their kidneys and also stiffness of joints. In several coastal villages along the 960 km. long coast line of this state there is the problem of water salinity. In addition there is frequent shortage of drinking water in the 14 drought prone districts of this state.

In India the following criteria has been applied for the selection of 'problem' villages—

- (i) Those which do not have an assured source of drinking water within a reasonable distance, say 1.6 kms.
- (ii) those where the sources of water-supply are endemic to water borne diseases like cholera, guinea worm etc.
- (iii) those where the available water suffers from excess of salinity, iron or flourides or other toxic elements hazardous to health.

As on April 1, 1980, there were 1.90 lakhs such villages in the country. In other words, nearly a third of the total number of villages are 'problem' villages from the point of view of the supply of drinking water.

A sum of Rs. 2000 crores has been provided for rural water supply during the sixth plan period. Rs. 600 crores under the Central Plan and Rs. 1400 crores under the plans of States and Union Territories. Officially it has been claimed that it will be possible to cover almost all the problem villages except in certain difficult areas in the hills and desert regions.

According to information given recently in the Rajya Sabha by Works & Housing Minister Mr. B. N. Singh, in 1980-81 drinking water supply facilities were provided to 25,978 villages, In 1981-82 the target was to meet the needs of 36,000 villages and in 1982-83 to provide relief to 45,000 'problem' villages.

These statistics sound impressive, but past experience indicates that these data can be deceptive. In the past also

such impressive statistics of achievements have been cited but when extensive reviews of the remaining problem villages were made it was found that the problem remained as bad as before, as the figure of 1.9 lakh problem villages in 1980 after years of efforts in this area clearly shows. For instance it was recently reported that the feeling in UP government circles is that rural water supply programme may fall short of its target for the sixth plan of the 35,506 scarcity villages, only about 9000 have been reportedly covered in the first two years of the plan.

From some points of view, the problem of drinking water has been becoming more worse for several villages. River pollution has been on the increases, and with this water supply to several villages and cities is adversely affected. The mining activities in the tribal areas of Bihar and Madhya Pradesh, for instance, have been steadily contaminating the water services of the tribal villages.

An estimated 70 lakh people live in the villages of seven western and southern states where the guinea worm disease has appeared in an endemic form and this problem too has been getting worse. The affected parts of the body can experience pain, swelling, rashes, stiffness and even paralysis. If the worm dies in the process of removal, the affected portion of the body gets septic. Almost none of these villages have access to clean water while it does not exist in most villages which have access to running water or properly constructed wells. According to a recent news report, only half the villages affected by guinea worms have been included in drinking water schemes.

In several hill areas, due to ecological ruin, the water available in several springs the only sources of water supply for a large number of villages has been reduced to a trickle during the dry season. Ironically while schemes of supply of piped water costing lakhs of rupees are being planned in many of these areas, to sources from which water for these schemes has to be obtained have been disappearing.

There is reason to believe that in India proper care regard-

ing minimising costs has not been observed. One indication of this is the widely different costs per village in various states for providing drinking water. The average cost per village for supplying water differs very widely from one state to another. In Karnataka it is Rs. 1600, in Nagaland it is Rs. 1.6 lakhs and in Punjab, where only pipe water schemes are being implemented, it is Rs. 4.26 lakhs.

Another serious problem is that from drinking water schemes the benefits conferred on the weaker section, specially the harijans, are minimal. A recent study made by the Programme Evaluation Organisation of the Planning Commission has shown that in the past the scheduled castes and other-weaker sections have not gained proportionately from the facilities created for water supply under the Minimum Needs Programme. In this area as in other areas of development plans it is extremely important to ensure that the poor are not deprived of the benefits of public investments.

Even in the drinking water supply schemes there have been several reports of corruption. Such misuse of funds appears all the more unexcusable when it takes place in the water-starved desert state of Rajasthan, and it is precisely here that one of the worst bunglings in this field occurred recently. Allegations of massive corruption have been made in the context of a Rs. 400 million contract to install 30000 pumps in over 9700 villages. Due to corruption in the contractors—officials—politician gang-up, most of the pumps were installed in such a manner that they do not yield any water. “It is estimated that 60 per cent of the pumps are not functioning at all”, says a recent report in India Today.

Scientists and farmers—A wide gap

India is the proud possessor of one of the most extensive farm research systems in the world. It is spread throughout the country in over 30 institutes of the Indian Council of Agricultural Research and over 20 agricultural universities. However, a feeling has been gaining ground that we have not succeeded in reaping a rich harvest from these fertile yet

somehow unproductive research establishments.

That there have been serious flaws in the set-up and functioning of farm research in our country has been well documented in some official reports. For instance, the last Achievement Audit Committee Report of the Delhi-based Indian Agricultural Research Institute (IARI), the biggest farm research institute in the country, had this to say on the research programmes being pursued in this institute : "It appears to the committee that the concept of new knowledge as we understand in science has been considerably diluted to include any observation as a piece of knowledge." In fact the committee asked itself the question—what new knowledge has emanated from the IARI in the course of the last few years ? It could find hardly one or two instances of this. It also said that "some of the divisions were glossing over the real problems and were more or less disinclined to go into them in depth." Elsewhere it said that the performance of the IARI in terms of high level scientific contributions "is not commensurate with the quality and quantity of the scientific input as well as of the financial outlay".

The interim Report of National Commission of Agricultural (NCA) commented, "What often passes as fundamental research in agriculture is but a variation of a similar study done elsewhere having little or no relevance to our conditions. Sometimes research workers having no connection whatsoever with the field of specialisation conduct work in sheer oblivion of the actual problems".

This Commission asked each of the institutes to list at least five of their outstanding achievements in the different categories of research. The results were most disappointing. The commission noted in its final report. "In most of these research (which included the best work done in these institutes), the techniques employed were well known and no new ground had been explored in the form of techniques or knowledge. Frankly speaking, it is doubted if more than half a dozen achievements would fall under the category of outstanding".

But the most shocking fact that has been highlighted in

the NCA report is that the yields in the neighbouring areas of research institutes of those crops in which these institutes specialise have been declining over the years. To quote from the report, "the impact of research result, if any, should be evident at least in the region close to the institutes and in other regions placed in similar conditions in regard to the application of the results of research. This is all the more expected in view of the widely publicised field demonstration days which are held for the benefit of neighbouring farms. But the opposite seems to be the case in these institutes".

The Central Rice Research Institute was set up in Cuttack (Orissa) in 1946, but rice yields in the neighbouring areas have been declining. During the decade 1960-63 to 1970-73, the average yield per hectare declined by, about 15 per cent in Cuttack, and also declined, though to a lesser extent, in the other neighbouring regions of Balasore and Dhenkanal. The Sugarcane Breeding Institute was set up in Coimbatore, Tamil Nadu, in 1942 but during this decade the yield of sugarcane in the district fell by about 10 per cent.

The Central Potato Research Institute was set up in Simla in 1949 but during this decade the yield of potatoes in Simla fell by about 16 per cent.

The Central Tobacco Research Institute was set up in Rajamundry, Andhra Pradesh, but in the course of this decade tobacco yields in neighbouring Guntur district fell by nearly 25 per cent.

One of the most important reasons for the poor performance of farm research is lack of genuine and close contacts between researchers and scientists, and limited understanding of the common farmer's problems by the researcher.

Drawing attention to this problem, the NCA noted. "The contracts of the research scientists with the end users of research have been loose.....Since extension has been thought to be less important a vocation, it has generally been relegated to the less enterprising scientists." This report also states that the problems in which research is to be conducted are chosen

by reading scientific literature on the concerned discipline, either Indian or foreign. Then an attempt is made to "somehow fit in (the research) with the local conditions." Rarely does the researcher go out and pick up his problems from his own direct observation or those of his colleagues engaged in field work. The Public Accounts Committee (PAC) Report on the ICAR also noted that farmers were not involved at any stage in the selection of research projects under the present day system of project selection.

The researcher's alienation from the farmer proves particularly dangerous when organised efforts are made by vested interests to push ahead particular farm strategies suited to them, for instance, the efforts made by the enormously powerful agricultural business interests to promote those varieties of crops which are highly responsive to big doses of chemical fertilisers and pesticides. Under such circumstances the scientist pressed from the top and alienated from the grass roots may well be made a tool of the organised vested interests to sell farm strategies whose spread they want to promote. This is precisely what has been happening over large tracts of land. Farmers who really need better seeds of traditional varieties and some improvements in land and water management practices are being forced to adopt exotic varieties requiring large doses of chemical inputs.

Farm exports from a hungry land

Among other ways in which colonial rule undermined the food base of Indian people was the forced drift from the cultivation of food crops to growing cash crops for exports, including indigo, tea, coffee, jute, etc. Even today a large area of India's cultivation land is devoted to the 'traditional exports to developed countries. In 1976-77 India exported, coffee, tea, cocoa, spices etc.' worth Rs. 4805 million. Another cash crop whose cultivation has spread rapidly and which is exported on a large scale is tobacco. In 1976-77 India exported tobacco and tobacco manufactures worth Rs. 1021 million. A lot of land transferred from staple cereals to sugarcane now con-

tribute to producing sugar for exports. Export of sugar, sugar preparation and honey amounted to Rs. 4749 million in 1975-76 and Rs. 1500 million in 1976-77.

Even during colonial rule export of oilseeds had come under criticism. It was argued that both from the point of view of the health of cattle as well as the fertility of land it is necessary that oilseeds should not be exported, oil extracted from them may be exported. India now earns (1976-77) Rs. 711 million from the export of oilseeds, oilnuts and oil kernels.

Similarly the export of bones from India was opposed during colonial days on the ground of denying traditional source of manure to Indian agriculture. Now we export 'animals and vegetable crude materials' worth Rs. 1065 millions.

Despite the food shortage in the country India also exported cereals and cereal preparation worth Rs. 176 millions in 1976-77 (this amounted to Rs. 250 million in 1974-75). Shortages of seasonal fruits and vegetables, and consequent rise in the price taking them out of the reach of the poor, is after reported and this is partly due to increasing exports of fruits and vegetables (Rs. 1582 millions in 1976-77).

One important reason why food shortages may be caused despite rise in foodgrains production is that more and more grains may be used for fattening meat animals. In India this trend has been accentuated by the export demand. India's exports of cattle feed have increasing rapidly. Exports of feeding stuffs for animals increased from Rs. 1035 millions in 1974-75 to Rs. 2565 millions in 1976-77. Exports of meat and meat preparations increased from Rs. 52 million to Rs. 178 million during the same period. Exports of fish and fish preparation, mainly for cattle-poultry industry of advance countries, increased for Rs. 1650 million to Rs. 1782 million. While foreign trade officials may be glad at the rise in foreign exchange earnings, this is taking place at the expense of the health and nourishment of Indian people as well as draught and milch animals.

There are indications that more and more land is being taken away from staple food crops to crop needed for exports and for multinational companies and other industries.

Faced with a serious foreign exchange crisis, the Indian government is going all out to increase farm exports, and if in the process cash-crops replace badly needed food crops, it does not seem to be bothered.

After a hesitant start, the cultivation of soyabean is now expanding rapidly in India and this trend is likely to be maintained in the near future. By 1974-75 nearly one lakh hectares of land had been brought under soyabean cultivation and by 1978-79 this area had increased to nearly 3 lakh hectares. At present, soyabean is being cultivated in over 7 ha. and by 1985 it is targeted to bring as many as 18 lakh ha. under soya cultivation. Madhya Pradesh and the terai regions of Uttar Pradesh have emerged as the two major areas of soyabean growth, and the future growth of soyabean is likely to take place predominantly in Madhya Pradesh.

Recently Mr. K.T. Achayya, consultant to the UN University Centre in Mysore, and a noted expert on Food and Nutrition questioned the wisdom of "extensive lobbying and deliberate market support in respect of soyabean when there are desperate shortages of everyday foods such as pulses and oil-seeds." He said that two thirds of the land now under soya in Madhya Pradesh was once used to raise jowar, millets and several lentils and ground-nut.

While jowar and millets can be directly cooked and consumed by common people, soyabean cannot be consumed without processing which makes it a meal for the affluent and not the poor, Mr. Achayya said. He said that soyabean cultivation cannot be justified as oil economy since its oil content is only 18 per cent compared to 45 percent for groundnut. The average output of soyabean per hectare is 800 kg. not different from that of groundnut under rain-fed conditions.

Mr. Achayya said that soya cultivation cannot be justified from the point of view of food needs. "For the vast majority

of people what matters for reasons of cost is foodstuffs that can be directly consumed without processing”.

Sreedhar Pillai reported recently in *India Today* (February 15, 1983) “Ripples of shock are running through Kerala’s placid paddy fields. The reason is a proposal to convert the state’s Kuttanad ricebowl into vast stretches of rubber plantations. The resultant storm of controversy is understandable. Kerala produces only 40 per cent of its requirements of rice, which is the staple diet. And Kuttanad, falling in the two districts of Alleppey and Kottayam, accounts for over 75 per cent of the state’s paddy land. If these shift to rubber, Kerala will be almost completely dependent on external supply for its staple food. That could be a precarious position...Powerful economic interests have ranged themselves behind the Rubber Board’s proposal.....But Kuttanad’s 100,000 acres of paddy provide work for an estimated 70,000 agricultural labourers, who are up in arms against the Rubber Board’s proposal.....Most farmers in the area have small holdings and their staying power is limited. One Trivandrum based economist predicted that in the event of a shift to rubber, most of these small holders will be forced to sell out to the big rubber planters...Much of the attraction of rubber is based on the high price ruling in the market which is protected by restrictions on the import of cheaper rubber. And a Trivandrum based agricultural expert points out that the government has been giving generous subsidies and loans to encourage rubber plantations, subsidies that have been denied to other crops. The Rubber Board itself has been doing out free saplings in polythene bags to farmers in the Kuttanad area.....”

Colonial roots of hunger

Backwardness of traditional Indian agriculture is a myth that has been propagated by vested interests. However, several contemporary sources testify to the wisdom and knowledge of Indian cultivators under colonial rule.

One of the most authentic sources of information on Indian agriculture at the turn of the century is the ‘Report on the Improvement of Indian Agriculture’ (1893) by Dr. John

August Voelckar, the Consulting Chemist to the Royal Agricultural Society of England. In this report he clearly stated, "I explain that I do not share the opinions which have been expressed as to Indian Agriculture being, as a whole, primitive and backward, but I believe that in parts there is little or nothing that can be improved, whilst where agriculture is manifestly inferior, it is more generally the absence of facilities which exist in the better districts than from inherent bad system of cultivation".

However the ability of traditional agriculture to meet food needs of the people was destroyed in several ways under the colonial rule of the British. Colonial rule's contribution to the problem of hunger were manifold ;

- (i) Imposition of a new socio-economic system in the villages leading to pauperisation of the peasantry and establishing a class of pro-British landlords infamous for exploitation of the peasants ;
- (ii) Extraction of the maximum revenue and leaving hardly anything in the hands of the village communities and the peasants which would enable them to invest in better agriculture ;
- (iii) Destroying traditional artisans specially weavers by flooding the Indian markets with goods from British factories and in other ways ;
- (iv) Encouragement to plantation crops for export and encouraging other cash crops at the expense of food crops ;
- (v) Exports of oilseeds, leading inadvertently also to shortage of cattle feed and impeding land fertility. Export of bones, leading to similar damage to land fertility ;
- (vi) Commercial management of forests and restrictions on villagers' rights to forest produce, leading to shortage of fodder, and other harmful effects ;
- (vii) T. Thomson noted in 'India and the Colonies' 1938,

“The roads and tanks and canals which Hindu or Mussalman government constructed for the service of the nation and the good of the country have been suffered to fall into ruin”.

- (viii) In the second half of the nineteenth century there was a big spurt in the exports of foodgrains (from £ 0.8 million in 1849 to £ 7.9 million in 1877 and £ 19.3 million in 1914). This, however, was also the period of the most extensive famine and famine deaths. While there were about 7 famines and 1.4 million victims in the period 1800-1850 there figures rose to about 24 and 20 million respectively in the period 1850-1900.

The basic problems of extreme inequalities, exploitation and an apathetic attitude towards development (bred by long years of neglect and plunder) were inherited from colonial rule.

Neo-colonialism perpetuates hunger

Foreign pressures certainly did not decrease after India become independent in 1947, only they assumed some new forms. Further, most of the new relationship for ‘rural development policies’ developed not with Britain but with the U.S.A.

In recent years the United States has lost in some important areas of industrial growth to Japan and Western Europe but its capacity to produce an important share of the world’s food and feed grains has become the most important factor in retaining economic supremacy. As a Western author states, “The commercial survival, and the status as a world power of the United States depends enormously and increasingly on its ability to sell its farm and agro-industrial products abroad”.

It is clear that the adoption of particular agricultural strategies by developing countries, specially big countries like India, is of concern to western agribusiness. If, for example, India relies mainly on land reforms, intensive cultivation by small peasant proprietors and use of local resources to increase farm production then there is not much scope for agri-

business to sell inputs to India. On the other hand, if the emphasis is on concentrating the use of technical inputs in some developed areas, then the agri-business firms can hope to sell large amounts of chemical fertilisers, pesticides farm machinery etc. to India.

Here it should be pointed out that the structure of the fertilisers and chemical pesticides importing agribusiness is such that the prices are artificially fixed very high, much above the actual cost of production. The aim is not to maximise production but to maximise profits. Once developing countries become dependent on large scale imports of these inputs, they have to pay these artificially fixed high prices. Thus the initial expenditure incurred by the developed countries by giving funds, technical aid, experts, etc. is recovered many times over in the form of expansion of markets.

India received large amounts of food under PL 480. It has been argued by several economists that this aid had a disincentive impact on Indian farmers, and to some extent at least can be held responsible for stagnation of India's agriculture. Further, this massive aid was not really needed, rather the need was created by high consultants and Indian officials acting in collusion with the foreign interests. Prominent economist K.N. Raj has argued that imports could have been moderated, even eliminated, as there were enough foodgrains to go around, "if distributed equitably". In a way, the 'soft' option of using the aid relieved the pressure on Indian government to distribute food, and land, equitably. Further, prominent economist, Raj Krishna, has indicted the failure of the government to step up internal procurement while imports under the PL 480 continued.

Meanwhile, partly aided by PL 480 counter-part funds, efforts were already being made to prepare the ground for a structural change of Indian agriculture so that it could absorb more of the expensive inputs of western agribusiness and meets the raw material needs of these countries. Today we see that such a structural change has already occurred in agriculture, dairy-development, fisheries and forestry sectors of India,

bringing huge profits to developed countries and accentuating hunger and dependence in India villagers. Details are not being given here as this is the subject of the already published Social change Paper 4. 'The Greater Green Revolution - High Technology Promotes Hunger and Dependence in Rural India'.

Agri-business waste

The food processing industry in India is rapidly growing. Through a cleverly organised sales campaign mothers have been motivated to give up breast-feeding in favour of 'healthy baby, infant milk powder and they also spend a lot of money on wasteful energy drinks for children. Men are being coaxed to spend their money on processed soft drinks specially the various colas, instead of more nourishing, much cheaper traditional drinks. 'Campa Cola' and 'Cadbury Chocolate' are the favoured delights to children who are exposed to a constant barrage of publicity regarding the fun they can have with 'junk foods'. White flour products constitute the breakfast of more and more people, replacing traditional whole flour diet. The grocery stores are saturated with processed foods, often manufactured with foreign collaboration, attractively packaged, highly priced but with little or no nutrition merit.

More and more barley, a traditional food which provided relief during the intense heat of the Indian summer, is being used to make beer, and more and more coarse cereals, staple food of the poor, are being used to produce cattle feed. Rice mills gain by excessive polishing of rice as they can sell the highly nutritious waste as 'cattle feed' while at the same time getting a higher price for 'glistening white rice'. However in the process they also expose millions of people to malnutrition.

L. Ramachandran has presented several estimates of the loss of nutrients on account of refining (polishing) of rice in mills. The loss of rice in quantitative terms ranges generally from 8 per cent to 16 per cent in ordinary milling and polishing, and in excess polishing it may go up to 27 per cent. The qualitative loss in terms of valueable nutrients is even more significant. (Details in Paper 4)

Care for the children at least

The Fifth Plan had laid down a target of 10 million beneficiaries to be covered by the Special Nutrition Programme for pre-school children in the age group 0-6 years ; for pregnant or nursing mothers the target was an increase of 6.3 million beneficiaries over the level achieved in the Fourth Plan. However, by 1977-78 only an addition of 2.3 million beneficiaries was achieved.

Under the mid-day meals programme for children in the age group 6—11, an addition of about 4.5 million beneficiaries was to be made. But the actual achievement at the end of the Fifth Plan was the addition of only about one million beneficiaries. An official review of the working of these schemes during the Fifth Plan said, “It was noticed that in spite of enormous investment inputs, the feeding programme had not produced an impact to an appreciable extent on the community. Continuity in the supply of food was not maintained in all the feeding centres. The minimum number of feeding days at each centre was not adhered to by many states. The co-ordination of this scheme with other services like health check-up, immunisation and safe drinking water left much to be desired. During 1974-75 and 1975-76 several states found it difficult to maintain the coverage of special nutrition and mid-day programmes reached by the end of the Fourth Plan, let alone expand it. . . .”

A programme to provide adequate doses of vitamin A to children to prevent blindness was launched in 1970 and accelerated in 1973 when a target for the coverage of 13 million children was laid down. But this important programme was badly bungled with the result that by the end of the year less than one-fourth of the original target was reached. In the poignant words of prominent social worker Tara Ali Baig, “12,000 children that year probably went blind.” Many of the children covered by the programme do not receive the intended benefit. The reason is the malnutrition can drastically impair a child’s capacity to absorb Vitamin A medication. If a child is malnourished or suffering from intestinal or respira-

tory infections, the vitamin retention is only 30 per cent which in many cases is not adequate to avert blindness. The available data on blind children indicate that malnutrition of children as well as pregnant mothers is the main cause of a large number of children going blind.

Let's all share a simple meal

Hunger in India is best tackled by all round, egalitarian development in agriculture and related areas in such a way that the present day backward areas are also able to increase food production, the present day landless, sharecropper, and marginal peasants are also able to grow food to meet their subsistence needs. This can only be accomplished by radical land reforms and changes in the existing power structure of the villages, as well as a change in the agricultural policies which have so far led to concentration of the development effort in a few areas.

Without these major changes taking place, to some extent, in a limited way, hunger can still be fought if there is a very rapid increase of foodgrains production, stocks with the government are adequate, arrangements for distribution of foodgrains at subsidised rates among the poor are made, grains can be rushed to the needy areas and there it actually reaches the poor and the starving people. On all these counts the prospects appear to be bleak if we examine carefully the foodgrains production and buffer stock trends and the performance of the public distribution system and the organisation of relief assistance.

In various parts of India the peasants, the share croppers, the workers are trying to find the path to a different egalitarian world where hunger of Rajasthan and luxury of Asiad hotels of New Delhi will not exist side by side. The fight against hunger is tied up with the efforts of these people.

Notes 1

1 Americal Dollar = Rs. 9. Re. 1 = 100 paise.

10 lakhs = 1 million. 1 crore = 10 millions.

Jowar and Bajra are coarse cereals. Roti is a thinly spread cereal preparation, the staple food in a large part in India.

Economic and Political Weekly (EPW) is a highly respected journal published from Bombay.

Harijans—A name given by Mahatma Gandhi to the so-called low-caste people.

